

CUNEIFORM TEXTS

IN

THE METROPOLITAN MUSEUM OF ART

II

LITERARY AND SCHOLASTIC TEXTS

OF THE

FIRST MILLENNIUM B.C.

EDITED BY

IRA SPAR AND W. G. LAMBERT

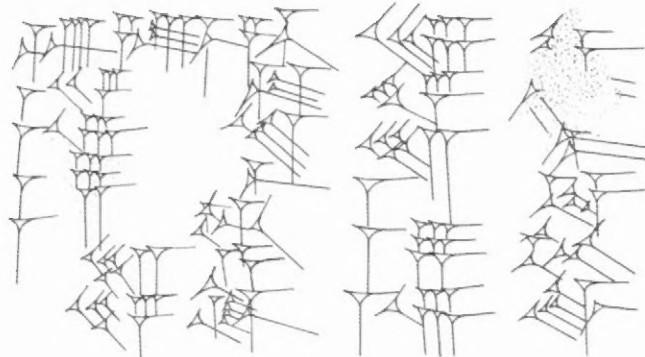
THE METROPOLITAN MUSEUM OF ART
BREPOLS PUBLISHERS

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THE METROPOLITAN MUSEUM OF ART, NEW YORK

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This publication has been made possible by The Adelaide Milton de Groot Fund, in memory of the de Groot and Hawley families.

Additional support has been provided by the New York State Council on the Arts.

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Published by the Metropolitan Museum of Art, New York

John P. O'Neill, *Editor in Chief*

Barbara Cavaliere, *Editor*

Peter Antony and Douglas Malicki, *Production*

ISBN 1-58839-157-4 (MMA); 2-503-51740-4 (Brepols)

Library of Congress Cataloging-in-Publication Data

Metropolitan Museum of Art (New York, N.Y.)

Cuneiform texts in The Metropolitan Museum of Art.

Contents: v. 1. Tablets, cones, and bricks of the third and second millennia B.C. / edited by Ira Spar.

1. Akkadian language—Texts—Catalogs. 2. Sumerian language—Texts—Catalogs. 3. Cuneiform tablets—New York (N.Y.)—Catalogs.

4. Metropolitan Museum of Art (New York, N.Y.)—Catalogs.

I. Spar, Ira.

II. Title.

PJ3711.M48 1987 492'.1 87-24770

ISBN 0-87099-495-6 (v. 1)

Typeset by Eisenbrauns, Inc., Winona Lake, Indiana

Printed by Brizzolis Arte en Gráficas, Madrid

Bound by Encuadernación Ramos, S.A., Madrid

Printing and binding coordinated by Ediciones El Viso, S.A., Madrid

Contents

Foreword <i>Philippe de Montebello</i>	VII
Acknowledgments	IX
Introduction: The Transmission of the Literary and Scholastic Tradition <i>W. G. Lambert</i>	XI
Technical Terminology	XX
Chrononlogy of Hellenistic Babylonian Rulers <i>Ronald Wallenfels</i>	XXI
Abbreviations	
Bibliographical Abbreviations	XXIII
Additional Abbreviations	XXXI
Symbols	XXXIII
Catalogue of Tablets	XXXIV
Concordance	XXXVIII
Indexes	
Personal Names	XLII
Divine Names	XLIII
Geographical Names	XLV
Temple and Chapel Names	XLVI

Part One: Nos. 1–24, Documents of the Temple Cult

Nos. 1–19: Hymns and Prayers	
No. 1: Old Babylonian Balag, to the Mother Goddess Aruru <i>Konrad Volk</i>	3
Nos. 2–18: Bilingual (Sumero-Akkadian) Hymns from the Seleucid-Arsacid Period <i>Stefan M. Maul</i>	11
No. 19: Fragment of a Solid Clay Barrel Cylinder with Unidentified Hymn <i>W. G. Lambert</i>	117
Nos. 20–23: Rituals <i>W. G. Lambert</i>	119
No. 24: Petitions <i>W. G. Lambert</i>	129

Part Two: Documents of the Incantation Priest, Diviner, Physician, and Magician

Preface <i>W. G. Lambert</i>	133
Nos. 25–29: Documents of the Incantation Priest <i>Markham J. Geller</i>	134
Nos. 30–33: Documents of the Physician and Magician	
Introduction and Nos. 30–32 <i>Irving L. Finkel</i>	155
No. 33: Fragment of a Neo-Assyrian Medical Text <i>W. G. Lambert</i>	171
Nos. 34–35: Documents of the Diviner: Liver Omens <i>Ivan Starr</i>	173
Nos. 36–38: Celestial Omens <i>Erica Reiner</i>	176

No. 39: Omens of Daily Life <i>Sally Moren Freedman</i>	184
Nos. 40–41: Omens from Abnormal Births <i>Erle V. Leichty</i>	188

Part Three: Literary Texts

Nos. 42–43: Myths and Legends	
Preface <i>W. G. Lambert</i>	195
No. 42: Atra- <i>ḫ</i> asis <i>W. G. Lambert</i>	195
No. 43: Fragment of Lugal-e <i>Stefan M. Maul</i>	201
No. 44: Historical Literature: Letter of Sîn- <i>šar</i> -iškun to Nabopolassar <i>W. G. Lambert</i>	203

Part Four: The Scholastic Tradition

Nos. 45–53: Syllabaries A and B <i>Miguel Civil</i>	213
No. 54: A Late Babylonian Number-Syllabary <i>Laurie E. Pearce</i>	222
Nos. 55–60: Texts from the Series Urra = <i>hubullu</i> <i>Miguel Civil</i>	230
Nos. 61: Late Babylonian Grammatical Text <i>Miguel Civil</i>	244
No. 62: Fragment of the Weidner God List <i>W. G. Lambert</i>	248
Nos. 63–64: Akkadian Synonym Lists <i>Anne Kilmer, Daniel Foxvog, John W. Carnahan</i>	249
Nos. 65–66: Late Babylonian School Exercise Tablets <i>Petra D. Gesche</i>	257
No. 67: Inscription on a Clay Ball <i>W. G. Lambert</i>	266
No. 68: Measurements of the Interior of the E-sagil Temple <i>Andrew R. George</i>	267
Nos. 69–71: Commentaries	
Preface <i>W. G. Lambert</i>	278
No. 69: Explanatory Commentary on a List of Materia Medica <i>Irving L. Finkel</i>	279
No. 70: Medical Commentary <i>Erica Reiner</i>	284
No. 71: Commentary on <i>Enūma Anu Enlil</i> <i>Erica Reiner</i>	285
Nos. 72–77: Mathematical Texts <i>Jöran Friberg</i>	288
Nos. 78–88: Astronomical Texts <i>C. B. F. Walker</i>	315

Part Five: Unidentified Fragments

Nos. 89–94: Unidentified Fragments in Akkadian <i>W. G. Lambert</i>	349
Nos. 95–97: Bilingual (Sumerian-Akkadian) Fragments <i>W. G. Lambert</i>	351
Nos. 98–106: Miscellaneous Fragments <i>W. G. Lambert</i>	353

Plates

Facsimile Drawings <i>Ira Spar</i>	Plates 1–118
Photographs of Selected Tablets	Plates 119–132

Foreword

It is with a great sense of pride that we present Volume Two in the series of four volumes that will document the collection of more than six hundred cuneiform tablets in The Metropolitan Museum of Art. The publication of this scholarly series reflects the Museum's ongoing commitment to promote greater knowledge of ancient Near Eastern civilizations and is especially pertinent at this time when knowledge of the history and culture of that part of the world is so relevant.

This volume examines 106 religious, scientific, scholastic, and literary texts and fragments, primarily from the later part of the first millennium B.C. Included are transliterations and translations of each text, accompanied by documentation and commentaries. Each genre is introduced with an essay by one of the eighteen participating scholars. Their contributions provide new insights and transport the reader to the complex and fascinating world of ancient scribes and their students, who were versed or training in Sumerian and Babylonian traditions.

The Museum acquired its collection of cuneiform tablets and fragments mainly in the late nineteenth century. Stephen Langdon first examined and published one of our Neo-Babylonian grammatical texts during World War II. Shortly thereafter John A. Maynard published a hymn to the goddess Aruru. Work on literary and scholastic tablets in the collection continued in the 1940s, with contributions by A. Leo Oppenheim and Louis F. Hartman and the publication of several mathematical fragments by Abraham J. Sachs. Otto Neugebauer published several astronomical texts in the 1950s. In the 1960s Sachs and Albrecht Goetze examined parts of the collection and suggested joins between fragments. Sachs later published an astronomical almanac dated A.D. 31/32. After the death in 1981 of Vaughn E. Crawford, Curator in Charge of the Metropolitan's Department of Ancient Near Eastern Art, Ira Spar, Professor of Ancient Studies at Ramapo College of New Jersey, undertook the task of assembling a group of distinguished scholars to study all the cuneiform texts in the Museum's collection. In this volume the editing and collating of the contributors' work is the joint effort of Spar and W. G. Lambert, Professor Emeritus at the University of Birmingham, England. In Spring 1996 and 1997 Lambert graciously agreed to come to the Museum on the invitation of Prudence O. Harper, then Curator in Charge of the Department of Ancient Near Eastern Art, and during his stays made new joins and collated text and tablet. We are deeply indebted to him for this, for his contribution of several entries, and for his invaluable work in editing all the manuscripts. Special gratitude is also extended to Ira Spar, who attended to every complex detail of this book and made the facsimile drawings of all the tablets that appear herein.

Initial research in support of this volume was generously provided by a grant from the New York State Council on the Arts. This publication has been made possible by the Adelaide Milton de Groot Fund, in memory of the de Groot and Hawley families.

Philippe de Montebello
Director
The Metropolitan Museum of Art

Acknowledgments

We wish to thank Prudence O. Harper, Curator Emeritus of the Department of Ancient Near Eastern Art at The Metropolitan Museum of Art, and Joan Aruz, Curator in Charge of the Department, for their encouragement and support. We gratefully acknowledge the untiring efforts of the distinguished contributors who have made this volume possible: John W. Carnahan, Miguel Civil, Irving L. Finkel, Daniel Foxvog, Sally Moren Freedman, Jöran Friberg, Markham J. Geller, Andrew R. George, Petra D. Gesche, Anne Kilmer, Erle V. Leichty, Stefan M. Maul, Laurie E. Pearce, Erica Reiner, Ivan Starr, Konrad Volk, and C. B. F. Walker. Our appreciation is also extended to Ulla Kasten for preparing the English translation of the German manuscript by Stefan M. Maul.

We also wish to acknowledge Jo Ann Wood for aiding in the inking of drawings and Ronald Wallenfels and Kevin Dante for their assistance in editing and reference checking, and to Wallenfels our thanks for contributing the note on Hellenistic chronology. We also offer our thanks to Liane Jakob-Rost, former Director of the Vorderasiatisches Museum in Berlin, for granting permission in 1990 for Stefan M. Maul to collate texts and check for possible joins between The Metropolitan Museum of Art tablets and tablets in the collections of the Vorderasiatisches Museum, and to her colleagues Evelyn Klengel and Joachim Marzahn for their cooperation and assistance.

Thanks are owed to the many staff members at The Metropolitan Museum of Art who assisted in the project: Cynthia Wilder coordinated the project and kept the files; John F. Morariu Jr. and Shawn Osborne have cared for and maintained the collection; and Jean-François de Lapérouse conserved the tablets and expertly joined and glued together text fragments. Anna-Marie Kellen produced the photographs, and Barbara Bridgers coordinated the photography. To John P. O'Neill, Editor in Chief, The Metropolitan Museum of Art, we express our deep gratitude for his expert guidance in bringing this volume to a successful completion. Peter Antony and Douglas J. Malicki ably oversaw our book's production. Our thanks to Pamela Nichols and Michael Brown of Eisenbrauns, Inc., for their dedicated and expert work in the typesetting and layout of this volume. Finally, a special note of recognition goes to Barbara Cavaliere, the editor of this publication for The Metropolitan Museum of Art, for her expertise, patience, and good humor in "editing and establishing (this volume) for instruction."

Ira Spar
W. G. Lambert

Introduction

The Transmission of the Literary and Scholastic Tradition

In pre-Hellenistic Mesopotamia reading and writing were skills always restricted to a few. Scribes were professionals with high status in society. There was no general literacy; even rulers were generally illiterate. Down the millennia only three kings claim, as a matter of boasting, to have been able to read and write: Shulgi, king of Ur (ca. 2095–2047 B.C.); Ishme-Dagan, king of Isin (ca. 1954–1935 B.C.); and Ashurbanipal, king of Assyria (669–631 B.C.).¹ There is evidence casting doubt on the last-named king's competence in the scribal art. No doubt flattering courtiers with the necessary skills provided the fine wording of his claims. Thus the abundant written remains from Sumer, Babylon and Assyria, and all the peoples around them who from time to time adopted the Mesopotamian writing techniques and scribal corpus have to be understood against this background.

Writing began in the far south of Mesopotamia ca. 3200 B.C. as a means of bookkeeping for large temple estates. The materials used were locally abundant and cheap—clay for the documents and reeds for styluses. From time to time other materials were also used for styluses—i.e., wood, bone, and metal—but reeds were always the most common material in use. For some three thousand years writing was preceded by systems of accounting using different shapes and sizes of clay tokens, but these had limited possibilities and were given up in favor of clay tablets with signs scratched on the surface with a stylus. Very rapidly some seven hundred different signs were created, apart from numerals. To help with this profusion the scribal schools compiled lists of signs and groups of signs by category, e.g., lists of titles of officials, of fish names, of names of vessels, of city names, etc. The great advance that came at this time was the development of signs with phonetic values. The tokens, and many of the seven hundred early signs, took the reader directly to the object or thing without any language intermediary. The sign for “fish” was a simple drawing of a fish, which could be grasped without any knowledge of the language of the scribe who wrote it (the same happens with numerals in the modern world). But such signs and nonpictorial symbols with the same function have limited possibilities. Personal names, names of places or fields, and titles of officials were not easily written with such simplified pictures or abstract designs. So the great advance was made of using the signs not only for the thing originally intended but also for the group of sounds made when the appropriate word was pronounced with another meaning. It is as if in English one drew a picture of a honey bee to indicate the verb “be.” Fortunately, many Sumerian roots are monosyllabic, so that the signs for them easily became a syllabary. For example, the Sumerian word for “cord” is eše or še, and the preposition for “toward” is še, although it was placed after the noun, not before. Thus to write “toward the city” the two signs were juxtaposed: CITY + CORD. This opened the way for the writing down of literature, which had hitherto been entirely oral. However, progress was slow. At first the development of signs for syllables (and vowels but not for consonants alone) did not displace the use of signs for complete words; such signs gave no hint of the pronunciation. To the very end of written Sumerian, shortly before the beginning of the Common Era, most Sumerian roots were written with logograms (signs that do not spell out the pronunciation), while the phonetic signs for vowels and syllables were generally restricted to the formative elements of grammar: those parts of a

language that indicate tense, person, mood, and suchlike in verbs, and that express the relationships of nouns in a sentence. Thus, reading a Sumerian text requires more than a basic knowledge of script and language, namely a knowledge and understanding of the category of text being read. And in the ancient world that meant being taught in a scribal school from knowledge being passed down orally through the centuries.

In the beginning, ca. 3200 B.C., and for the next few centuries, logograms were used entirely, or almost entirely, and texts were restricted to administrative documents and scholarly lists of words. But by the middle of the third millennium B.C. copies of royal inscriptions, letters, and magic, cultic, and literary texts had begun to appear, and a beginning had been made to put at least some of the grammatical elements of the spoken language in the script. This process continued to the end of that millennium, when Sumerian was almost a dead language, preserved only in the scribal schools, where, at least in the best of them, it persisted for almost two more millennia.

By 2000 B.C. the living languages of Mesopotamia were Semitic. Upstream from Sumer as far back as our evidence goes—ca. 2500 B.C.—the Sumerian writing system was being adapted to the very different Semitic tongue that we call Old Akkadian. The Semitic languages do not have separable verbal and nominal roots as Sumerian does, but the roots are inextricably mixed within individual words. Thus Old Akkadian required more phonetic writing than Sumerian to be intelligible, and by ca. 2000 B.C. in most Semitic inscriptions only common nouns were written as logograms; the rest was rendered phonetically in signs for vowels and syllables. Writing was then extensively used for administrative and legal documents and also for communication between rulers and wealthy businessmen and others. But that is not our subject here.

With this background it is possible to approach the cuneiform tablets published in this volume. All but one are of first-millennium B.C. date—many indeed from late in that millennium, from Babylon, and from the second century B.C. Only one (text No. 1) is Old Babylonian, from between ca. 2000 and 1700 B.C. But they are all part of a common scribal corpus following on the traditions of the third millennium B.C. Knowledge of the scribal circles that produced and transmitted these texts is very limited. The scribes mostly had no interest in or intention of recording such information. In the Old Babylonian period, ca. 2000–1600 B.C., texts circulated in Sumerian, rarely with Babylonian translations, which provide accounts of life in the Old Babylonian scribal school (Sum.: “*Eduba*,” “Tablet House”), while others are copies of texts that formed the curriculum. But later periods seem not to have produced similar material. Accordingly we are left to our own deductions, aided by the odd scraps of information that happen to survive.

First a caution must be expressed about the survival of material relevant to our inquiry. It is of course often a matter of accident that particular archaeological finds have been made. In addition particular circumstances in the ancient world have resulted in finds of cuneiform tablets or the lack of such finds. The sudden and complete destruction of a city, quarter, or building would result in the best possible conditions for the survival of cuneiform tablets. Indeed, a fire would harden tablets that were (as often as not) only sun-dried. In contrast the slow decline of a city or area normally meant that objects of value would be taken away for preservation elsewhere, or removed by vandals and lost to us. As it happens a modest quantity of nonarchival tablets has survived and reached us from the first half of the second millennium B.C., but very little from the second half, except from sites outside Mesopotamia such as Syria and Anatolia, and not so much even from these. In contrast a vast quantity of such material has been recovered from Assyrian sites, especially Ashur and Nineveh, dating to between ca. 750 and 600 B.C., including the remains of Ashurbanipal’s palace library. Much also remains from first-millennium B.C. Babylonia, but from a wider time-spread, namely ca. 700–100 B.C.

There were certainly different categories of cuneiform scribes. Since the vast majority of documents written were administrative, legal, and for business affairs, obviously a majority of scribes would have been occupied with

those, and the expertise required could have been limited to the needs of particular categories even of those texts, since there would have been much repetition. Scribes working on scholarly texts and literature would need to have higher levels of skill, skill for which there was a limited market. Of course it is possible that particular scribes who worked recording court cases or producing administrative documents had private hobbies of writing down library texts to form private libraries, but it is doubtful whether or not this was common. However, there were certainly several categories of scribe who might have been, or are known to have been, specialists in library texts.

First, those who taught cuneiform writing would surely have included in their number some with the highest skills. The Old Babylonian Eduba texts give the impression of private schools catering to the upper classes of society, but information for later periods is lacking. The skills involved could not have been learned on the job, as can happen with some manual crafts, in which the apprentice assists the craftsman, first doing odd jobs and then gradually acquiring the skills of his boss. Reading and writing cuneiform script required formal lessons over a period before a boy (girls almost never became scribes) could usefully and reliably write out, and still more compose, a document.

While the institution of the Eduba, “Tablet House,” is not attested in post-Old Babylonian times, a first-millennium ritual tablet for the Esagil temple in Babylon mentions as a participant in the rites a “son of the Eduba,”² which might freely be rendered into English as “seminarian.” And this raises a question. Certain institutions and professions in this civilization needed scribes of high caliber, and they could have run their own schools. Temples are one such case. They needed learned men to recite Sumerian and Babylonian liturgies and to keep copies of them to help maintain the tradition. Tablets giving details of the rituals also needed to be available and used. We know that major temples in first-millennium Babylonia and Assyria had scholarly libraries comprised not only of texts relevant for the temple cult but also of scholarly and literary texts in general. It is therefore quite possible that these temples trained their own scribes. The court was a similar case. The king had need of scribes for the administration of his realm. He also needed those capable both of producing correspondence for international exchanges and of composing royal inscriptions for posterity in highly literary style, even in the dead Sumerian. With needs of these kinds to be met, it is possible, but not confirmed so far, that major courts would support schools to supply them. There is evidence that royal scribes were a power in the transmission of library texts. In Assyria, ca. 1200–1100 B.C. and again ca. 700 B.C., some royal scribes owned private libraries of such material. Another category of need was that of the experts whose fields were based on written materials but who practiced as freelance practitioners. In the first half of the first millennium B.C. at least some Babylonian diviners, perhaps most, worked on a self-supporting basis and would have needed private libraries of tablets relevant to their professional work. According to surviving texts these experts trained one son to succeed them in their profession. While these sons could have learned the elements of cuneiform writing at schools open to any parent willing to pay the fees, the secrets of the profession must have been taught to the son by his father.³

This last example introduces what was a common feature in this world. Sons often succeeded fathers in their profession, and this could continue for centuries, although when a man had only daughters or only unsuitable sons, no doubt he could adopt a son to succeed him. In first-millennium B.C. Babylonia this is known from the custom of identifying people not only by patronym “X, son of Y” but also by a family name, “X, son of (*māršu ša*); Y, son of (*mār*) Z.” The distinction between the two possible ways of expressing “of” means that the first-named father was the physical father and the second-named man was a remote ancestor claimed by many people. Of these ancestors’ names many are genuine personal names, and there is no reason to doubt that they belonged to real people. Others, however, are titles of professions—e.g., “Temple-administrator of Ea” (*šangî-Ea*), “Smith” (*lûsimug/nappâhu*), and “Salt-merchant” (*ša tâbtîšu*)—pointing to the conclusion that, in origin at

least and often in reality, they indicate persons sharing a profession. This custom is commonly attested from the ninth to the second century B.C. Before that period the simple “X, son of Y” may refer either to the actual father or to an ancestor. Rarely, however, the ancestor may be given specifically, as in a boundary stone of the sixteenth year of Nebuchadnezzar I (ca. 1110 B.C.):

^{1d}Nā-numun-si-sá dumu ¹Ki-^dAmar-utu-ti-la šà-bal-bal ¹Ir-^dÉ-a
Nabû-zēru-lišir, son of Itti-Marduk-balātu, descendant (*liplipi*) of Arad-Ea

(W. J. Hinke, *A New Boundary Stone of Nebuchadrezzar I* [Philadelphia, 1907], p. 148 col. iii 13–14)

Some half-century earlier, under the Kassite king of Babylon Marduk-apla-iddina I, the official Marduk-zākir-šumi received a piece of land as a perquisite from the king. His family is stated as “son of Nabû-nādin-ahhī, whose grandfather was Rēmēni-Marduk, fourth generation of Uballiṣu-Marduk, descendant (šà-bal-bal) of Arad-Ea.”⁴ The king’s ancestry is stated as “[son of] Melishipak, king of Babylon, descendant (šà-bal-bal) of Kurigalzu, the king without rival.”⁵ Marduk-apla-iddina ruled ca. 1172–1159 B.C., and Kurigalzu II (the last of that name) ruled ca. 1333–1308 B.C. This ancestor, Arad-Ea, can be followed farther back. A boundary stone from the reign of Melishipak (ca. 1082–1069 B.C.) mentions the official “Iqīša-Baba, son of Arad-Ea, expert accountant” (¹Ba^{šá}-^dBa-ba₆ dumu ¹Ir-^dÉ-a um-mi-a níg-kas₇; King, *BBSI*, p. 21 ll. 8–9 = pl. xxv 8–9). It is surely the same man who appears in two seals of a certain Uballissu-Marduk, an official under one of the two Kurigalzus. The inscription on one of the seals is mostly an address to the goddess Ninsun; only the last four lines give information about the owner:

^Ú -ba- ^{lí} -su- ^d Marduk dumu Arad-é-a um-mi-a níg-kas ₇ ìr Ku-ri-gal-zu lugal kiš	Uballissu-Marduk, son of Arad-Ea, expert accountant, servant of Kurigalzu, king of the world
--	---

(CT 36, 5)

The other seal devotes only the last two lines to religious matters; the first twelve name the ancient owner and give his ancestry:

^Ú -ba- ^{lí} -su- ^d Marduk[k] šà-tam šu-dim ₄ -m[a] Ku-ri-gal-zu lugal š[ár] dumu Arad-é-a um-mi-a níg-ka[s ₇] dumu-dumu ^U š- ^{šur} -a-na- ^d [. . .] gá-dub-ba é-[kur(?)] šà-bal-bal ^Ú - ^{ši} -a-na-nu-ri-[šu/ša] GÌR-NÍTA ^{kur} Dilmun ^{ki} ^{ra} nu-bal-4-kam-m[a] ^[d] En.zu-i-ri-ba-a[m] [x (x)] x kin/tuk giš b[u(?)]	Uballissu-Marduk, administrator of Kurigalzu, king of the world, son of Arad-Ea, expert accountant, grandson of Uššur-ana-[. . .], governor of E[kur(?)], descendant of Úši-ana-nūrī[šu/ša], regent of Dilmun, great-great-grandson of Sîn-iribam, the [. . .] . . . ⁶
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The longer inscription is the more easily interpreted. Each person named has his own title, and dumu-dumu, “grandson,” ensures that in the context Arad-Ea was the actual father of Uballissu-Marduk, not his ancestor. The term dumu, “son,” in the shorter one is thus confirmed as indicating actual parentage, but the two titles in the shorter inscription are ambiguous as to reference. Since “expert accountant” is the title of Arad-Ea in the longer one, it would seem obvious at first glance that the same must hold for the shorter one, but then it is hardly possible to understand “servant of Kurigalzu” as the son Uballissu-Marduk. The two titles can hardly be split, but then the seal owner has no title at all, which is most improbable. Most probably the two titles refer to the seal owner, and we accept as a consequence that the order in the two inscriptions is inconsistent but find no problem in father and son having the same profession. There is the additional problem of which Kurigalzu is meant, a topic that will be left open here.

The importance of these seal inscriptions is that they identify a well-known first-millennium ancestor in a precise context: he lived in the Kassite period. This fits with the fact that so far such professional ancestors have not been found in the Old Babylonian period. It seems that this was a Middle Babylonian development. This institution of family descent is important for the development of literature and scholarly texts, as it shows that a continuity existed in the high professions that would have protected their traditions. From the twelfth to the ninth century B.C. the names of descendants of Arad-Ea appear on boundary stones and similar documents as holding state offices that required literacy, although there is no evidence of their involvement in the development of literary and scholarly texts.

However, there is such evidence with regard to an ancestor of another town. Many scribes of Uruk in the Seleucid and Parthian periods name a Sîn-leqe-unnninni as their ancestor.⁷ The same name is given as the author of the Gilgamesh Epic in a catalogue of texts and authors from the Ashurbanipal libraries:

éš-gär ^dGIŠ.GÍN-maš : ša pi-i ^{ld}Sin-le-qé-un-nin-ni ^{lú}m[aš-maš ^{lú}um-me-a Uruk^{ki}]

The series of Gilgamesh: by Sîn-leqe-unnninni, ex[orcist, scholar of Uruk].

(W. G. Lambert, “A Catalogue of Texts and Authors,” *JCS* 16 [1962], p. 66 VI 10)

This line refers to the standard first-millennium edition of the Babylonian epic. A late Babylonian tablet excavated at Uruk, written there in 165 B.C. by a scribe named Anu-bēlšunu, who claimed to be a descendant of Sîn-leqe-unnninni, gives a list of the most famous wise men and scholars from the beginning of civilization. All those who came after the flood are known to us as authors, and the first is:

[ina/a-na tar-ṣi ^{ld}GIŠ.GÍ]N-maš ^{ld}Sin-ti-ér ^{lú}um-man-nu

[Contemporary with Gilga]mesh: Sîn-leqe-unnninni, scholar

(J. J. A. van Dijk, “Die Tontafeln aus dem rēš-Heiligtum,” *UVB* 18, pp. 44–45)

The dating of this scholar in this inscription is of course wildly wrong, but it attests to the strong tradition, which we have no reason to doubt, that he was considered the author of the then-current Gilgamesh Epic. There had been five Sumerian Gilgamesh epics, which do not form a cycle; from two of them, with other materials, one long Babylonian epic eventually emerged. It appears that the composite story existed by 1600 B.C., but it circulated in widely differing recensions until at least 1200 B.C. However, all but one known first-millennium copies belong to the one “canonical” version, which alone survived. No doubt the truth about Sîn-leqe-unnninni is that he edited an existing work and by chance this edition ousted all others in due course. When he worked is a question without answer at present, but as a scribal ancestor he probably lived under the Kassite dynasty, ca. 1600–1150 B.C. In that case he was not the literary genius who created the composite Babylonian epic but a scribe who centuries later produced a

relatively good edition of it. But this does not explain what part, if any, his scribal descendants played in the promotion of his edition. Some of the tablets in this volume come from such scribes, but they are not from the famous epic.

There is, however, more evidence of the work of famous scribes in producing editions of particular texts or categories of texts.

- (i) A colophon added at the end of a tablet of medical content reads:

[na]p-šá-la-tú tak-ši-ra-nu lat-ku-tum ba-ru-ti šá ana [qā]ti šu-šú-ú
 šá p̄ apkallē(abgal)^{meš.e} la-bi-ru-ti šá la-am abūbi(a-má-uru₅)
 šá i-na Šuruppak(LAM × KUR)^{ki} mu.2.kám ^{ld}En-lil-ba-ni šarri ^{uru}ši-in^{ki}
^{ld}En-lil-mu-bal-līt apkalli Nippuri^{ki} x-BU-la mu-du-u mu-da-a li-kal-lim
 mu-du-u la mu-da-a la 'ú¹-[kal]-lam ikkib(níg-gig) ^dMarduk

Tested ointments and bandages: the diviners' corpus, which are available,
 according to the old sages from before the flood,
 which, in Šuruppak, in the 2nd year of Enlil-bani, king of Isin,
 Enlil-muballit, sage of Nippur. . . .⁸ The expert may show to the expert,
 but the expert may not show to the non-expert: it would be a taboo of Marduk.

(AMT 105, col. iv 21–25 [collated])

This Enlil-muballit appears not to be known elsewhere, but the precision of the date and the location of the man in Shuruppak although he was a sage of Nippur suggest that this is reliable information. However, the attribution of the material to the antediluvian sages follows an old tradition that has no historical validity.

- (ii) A colophon note in the middle of *KAR* 177 (obv. IV 25–rev. IV 3 [*sic!*]), a hemerological text, explains the origin of the preceding material:

ud^{meš} dùg-ga^{meš} šá p̄ 7 a[p-kal-li]
 gaba-ri Sippari^{ki} Nippuri^{ki}
 Bābili^{ki} Larsa^{ki}
 Uri^{ki} Uruk^{ki} u Eridu^{ki}
 um-ma-a-ni ú-na-as-si-hu-ma
 ú-na-as-si-qu-ma
 a-na ¹Na-zí-múru-¹taš¹
 šär kiššati(šú) iddinu^{nū}
 ana su-bu pu-ut-qe-e
 za-re-e šér-re-e
 ša-ba-áš ka-re-e
 ù mim-ma si-bu-te ḥubbī(dùg-ga)

Favorable days according to the seven s[ages]: an original of Sippar, Nippur, Babylon, Larsa, Ur, Uruk, and Eridu, the scholars excerpted, selected, and gave to Nazi-muruttaš, king of the world, for completing constructions, planting the furrows, taxing the grain piles, and for the successful completion of any business.

As before, we can accept what is written about the scholars of Nazi-muruttaš's days without problem, but the attribution of the material to the seven sages (one each from the seven towns named?) is incorrect ideology. Since Nazi-muruttaš reigned ca. 1308–1282 B.C., the editorial process described is to be put in the twelfth century B.C.

(iii) Another paragraph of this kind is appended to a catalogue of the medical series Sagig, known from two copies, CTN 4, 71 and BM 41237⁹. It begins:

ša ul-tu ul-la zarâ(sur-gi[bil])¹⁰ l]a šab-tu₄
 ù gim gu^{meš} gili^{meš}-ma gaba-ri là išú(tuku)
 ina palē^{1d} Adad-apla-iddina(sum)^{na} šār Bābili^{ki}
 gibil-bi-sè [è?]-àm¹ Èš-gú-zí-gin-a A^{1d} Asal-lú-hi-ma-an-sum
 abgal^d Ha-a[m]-mu-ra-bi šarri . . .
 ina ka-bat-ti-šú uš-ta-bil-ma sa-gig ta muh-hi en gîr^{meš}
 zarâ([s]ur-gibil) uš(t)ašbit(? dib^{meš})-ma ana iħzi(níg-zu) ukîn(gub)ⁱⁿ

That which since time immemorial had no editing, and which was raveled like threads, and had no original, in the reign of Adad-apla-iddina, king of Babylon, to [produce] it anew, Esagil-kîn-apli, “son” of Asalluhi-man-sum, sage of Hammurabi the king . . . considered the matter in his mind and gave Sagig, from head to foot, an editing, and established it for instruction.

(Ll. rev. 8–12, 18–19 = 18’–20’, 25’–26’)

The lines omitted give the extremely verbose titulary of Esagil-kîn-apli, which describes him as a high cleric in the temple of Nabû in Borsippa. The king Adad-apla-iddina ruled from ca. 1068 to 1046 B.C. The learned scribe here, Esagil-kîn-apli, is also named in the text quoted above, which makes Sîn-leqe-unnninni a contemporary of Gilgamesh. But the line involving Esagil-kîn-apli and the two following lines are seriously corrupt.¹¹ He also appears, with no problems but with no information, in the list of learned names and often demonstrably scribal personal names in IV R² 44, II–III 44, edited in W. G. Lambert, “Ancestors, Authors, and Canonicity,” *JCS* 11 (1957), p. 13.

(iv) A still further set of colophonic notes occurs on a Late Babylonian tablet with a catalogue of the lexical series SIG₇.ALAM = *nabnītu*. It is published in MSL 16, pp. 12–15. The reverse, which contains the material of interest here, is in poor condition, but some help comes from the unpublished duplicate BM 40855. This is not the place for a full editing, since very great difficulties remain. A few lines (ll. 27–31) are excerpted below:

ki dub.sag su-ud-du-ru-ma [š]u(?)¹Ur-^dNin-tin-ug₅-[ga]
 dumu¹Iz-kûr-^dNin-urta lúbârî(hal) ki-i a-ta-ru ina libbi dub^{meš} 'an-na¹-t[...] . . .

dub-sag^{meš} ki-i gaba-ri Nibrû^{ki} u Ká-dingir.ra^{ki} igi-ká[r . . .]
¹Iz-ku-úr-^dNin-urta mar¹À-dal_x(PI)-lal-šarra lúbârî(hal) šá¹Ur-^dNin-[tin-ug₅-ga]
 dumu¹Iz-kûr-^dNin-urta ú-maṭ-ṭu-[ú]

... were arranged by incipit. Hand(?) of Ur-Nintinug[ga], son of Izkur-Ninurta, the diviner. When they were in excess, from these tablets [...] . . .

Incipits according to an original of Nippur and Babylon, checked; [hand of(?)]
Izkur-Ninurta, son of Adallal-šarra, the diviner; what Ur-Nin[tinugga],
son of Izkur-Ninurta, diminished.

These lines read like originally independent colophons collected on this tablet. The important name is Ur-Nintinugga, since it also appears in the list IV R² 44, II–III 9, with the Babylonian translation Amēl-Gula. A person of this name also appears in a dream to the hero of the Wisdom text *Ludlul bēl nēmeqi* (Lambert, *BWL*, p. 50: III 39–41), but he cannot be the same, since he was an exorcist, not a diviner. A greater possibility, but still no certainty, lies in the person Ur-Nintinugga, about whom the boundary stone King, *BBS* no. III tells. A piece of land had been assigned by the king Adad-šuma-iddina (ca. 1223–1217 B.C.) to a *bārû*, “diviner,” named Takil-ana-ilīšu. He died and left no male heir, so the king assigned the land to Ur-Nintinugga, brother of the deceased holder. As often, the land was in effect remuneration for services to the king, and Ur-Nintinugga is also described as a *bārû*, “diviner,” and as son of Sāmu. If the latter was the actual father, then the son cannot be the Ur-Nintinugga of the colophons, but if Sāmu was an ancestor, the possibility of identity is open. Sāmu is a family name that appears in some Late Babylonian documents.

These examples have been quoted as demonstrating the process of development of scholarly texts in the period ca. 1500–100 B.C. and also showing that the later scribes of this period preserved apparently reliable knowledge of the facts. Before 1600 B.C., that is under the Old Babylonian period, and during the Third Dynasty of Ur and still earlier, the material is much less sure, and some of it is certainly unhistorical. The major facts for the period of concern here are the existence of scribal families and the editing of texts by distinguished scholars.

Pure literary creativity was another matter. Oral performance was a factor, and it is quite clear that Old Babylonian texts like Gilgamesh and Atra-ḥasīs were not well understood everywhere in the Late Babylonian period. While some copies are well written (the MMA piece [text No. 42] of Atra-ḥasīs is such), others are seriously corrupt.¹² If some learned scribes did not understand traditional literary compositions, the illiterate masses must surely have been even more ignorant.

The scribes who wrote the tablets that have survived are often known to us from the colophons, which, however, give only formal details. We can know something of the training they underwent from exercise tablets, which survive in the thousands from Late Babylonian archaeological layers, along with the more mature scribal products. Although no curriculum of a scribal school of this period survives, the exercise tablets allow us to gain a general picture. Lists of signs were frequently excerpted, or even copied out in toto (text Nos. 45–54); no doubt these were the first kind of material to be mastered. Excerpts from lexical texts (text Nos. 55–61) provided an introduction to entire words, often within a meaningful context. Scribes copied gods’ names in extracts (text No. 62) or in a more lengthy form, such as is found in the Weidner god list, the only well-known traditional list of gods’ names without explanatory clutter. The most mature students copied out a variety of extracts (text Nos. 65–67) on one tablet: first extracts from several lexical series, then extracts from a similar variety of literary classics—myths, prayers, incantations, etc. We do not know how long such a curriculum lasted, since we know of it only from the leftovers of the process, some of which appear in this volume.

W. G. Lambert

1. Shulgi: Hymn A l. 19 in J. Klein, *Three Šulgi Hymns: Sumerian Royal Hymns Glorifying King Shulgi of Ur* (Ramat-Gan, 1981), p. 188; Išme-Dagan: M.-C. Ludwig, *Untersuchungen zu den Hymnen des Išme-Dagan von Isin* (Wiesbaden, 1990), p. 166; Ashurbanipal: M. Streck, *Assurbanipal und die letzten assyrischen Könige* (Leipzig, 1916), pp. 254–56, 13–18.
2. W. G. Lambert, “The Late Babylonian Kislimu Ritual for Esagil,” *JCS* 43–45 (1991–93), p. 93 l. 9, cf. pp. 90–91.
3. W. G. Lambert, “The Qualifications of Babylonian Diviners,” in S. M. Maul, ed., *Festschrift für Rykle Borger zu seinem 65. Geburtstag am 24. Mai 1994* (Groningen, 1998), pp. 141–58.
4. W. G. Lambert, “Ancestors, Authors, and Canonicity,” *JCS* 11 (1957), pp. 9–10 lists descendants of Arad-Ea, although the whole article is in need of revision.
5. King, *BBSI*, p. 26 col. i 20–26, pls. xxxii–xxxiii.
6. Edited by J. A. Brinkman, “A Kassite Seal Mentioning a Babylonian Governor of Dilmun,” *NABU* (1993), no. 106, pp. 89–91. The object itself and an enlarged photograph of an impression have been used here. The restoration of *kas₇*, not *ra*, is based on the sense and on the passage quoted from the Meli-šipak boundary stone with the same phrase. King already observed in n. 9 on p. 21 of *BBSI* that the sign in l. 9 is unlike the certain *RA* in l. 13. Also two other Kassite seal inscriptions have the title *um-mi-a-níg-kas₇* with a clear *KAS₇*; for these see W. H. Ward, *The Seal Cylinders of Western Asia* (Washington, D.C., 1910), p. 185 no. 517; and A. Moortgat, *Vorderasiatische Rollsiegel* (Berlin, 1940), no. 557. Generally, the paleography of the various signs that merged in late forms of ŠID, etc., needs investigation. Also the shapes of the signs in Kassite-period seal inscriptions are frequently not reliable guides to their values; see W. G. Lambert, review of H. Limet, *Les légendes des sceaux cassites*, Académie royale de Belgique, Classe des lettres et des sciences morales et politiques, Mémoires, 60, fasc. 2 (Brussels, 1971), *BiOr* 32 (1975), p. 221a.
7. See W. G. Lambert, “Ancestors, Authors, and Canonicity,” *JCS* 11 (1957), n. 4; and O. Schroeder, “Aus den keilinschriflichen Sammlungen des Berliner Museums II,” *ZA* 32 (1918/19), pp. 14–22.
8. To this writer’s eyes the last two signs of the word are *bu-la*, but the first is damaged and uncertain: KU/LU IB/TU, etc., are possibilities.
9. See I. L. Finkel, “Adad-apla-iddina, Esagil-kin-apli, and the Series SA.GIG,” in E. Leichty et al., eds., *A Scientific Humanist*, pp. 143–59.
10. The Akkadian technical term *zarû* (*CAD Z*, p. 70) for some scribal process is perhaps to be explained from this very passage, in which editing a text is compared to weaving. In the latter process the threads have to be kept in position to produce finished cloth. The textual editor similarly has to keep the words strictly under control and in their places to yield a reliable text. The Sumerian *sur* means “weave” (*tamû*); see MSL 14, p. 350 98, 111, so *sur-gibil* means “new weaving” or “revised edition.” Note that the sign BE with the meaning “weave” has the pronunciation *za-ra* (MSL 14, 250 82), from which, perhaps, the Akkadian scribal term *zarû* derives.
11. In UVB 18 44–45 there is space for only two signs for the name of the king under which Esagil-kin-apli is put, which is too few for any likely name. The next two kings, whose names are complete, are both equated with Esagil-kinam-ubbib, the author of the Theodicy (Lambert, *BWL*, pp. 63–89), but this requires that they be in incorrect chronological sequence, since Nebuchadnezzar I ruled before and not after Adad-apla-iddina. If chronological sequence is followed, then it must be Nebuchadnezzar II, but this excludes one man being the expert under the two kings. And the name of Esagil-kinam-ubbib is given corruptly as -ubba once, and -ubbalu the second time.
12. As one example note that the second line of Atra-ḥasis is corrupted from *ub-lu du-ul-la iz-bi-lu šu-up-ši-[i]k-ka* in the Old Babylonian copy to *i-lu ni-ra ib-nu-ú tu-up-ši-ik-ku* in the Late Babylonian copy (A. R. George and F. N. H. Al-Rawi, “Tablets from the Sippar Library VI. Atra-ḥasis,” *Iraq* 58 [1996], p. 153). The first is entirely lucid: “they bore the work, they suffered the toil.” The latter seems to mean “the gods created the yoke, the toil,” which is neither lucid nor good style: the *i-lu* is an obvious corruption of *ub-lu*.

Technical Terminology

Literary and other library tablets of the second and first millennia B.C. are normally oblong in shape. Originally the writing began at the top right-hand corner and proceeded downward in successive vertical lines, and then in successive horizontal columns if the length of the text and the size of the tablet required more than one column. At some time the angle of writing was changed by turning the tablet around ninety degrees so that the writing began at the upper left-hand corner and proceeded rightward in horizontal lines, exactly as in modern scripts derived from the Latin alphabet. Columns similarly moved from left to right as in today's printed material, but only on the obverse of a tablet. When the last line of the final column of the obverse had been written, the tablet was turned top to bottom—not sideways—and the first column on the reverse began immediately over the edge from the last column on the obverse. The writing continued to be from left to right, but the columns on the reverse ran from right to left. Thus the final column on the reverse was adjacent to the left edge.

The period when this change in direction of writing took place is not easily ascertained, as clay tablets, the most common writing medium, can be held either vertically or horizontally. In contrast, inscriptions on stone or metal statues or statuettes often show the direction of the writing because they have a base, or the direction may also be ascertained from the obvious orientation of the object. But script on such works of art is often monumental and archaic as compared with contemporaneous tablets, so the direction of writing too might be archaic. The reason for the change of direction on tablets was no doubt to avoid smudging lines already impressed in the soft clay as the hand moved leftward to write additional lines. Script on stone or metal was not subject to such smudging. Thus the appearance of horizontal lines of script on statues and stelae of the second half of the second millennium B.C. suggests that the change had taken place long before, perhaps ca. 2000 B.C.

Library texts of the Assyrians and Babylonians did not normally have titles. Most commonly the opening line or phrase served as a title, and accordingly in the modern world this is called an incipit (Latin: "it begins"). As for the other material that occurs on the title page or on the back of the title page of a modern Western book—details of position within a larger whole (e.g., "Volume 2"), of author, publisher, date, etc.—the equivalent material occurs on cuneiform tablets at the end and is called a colophon. Colophons give the number within the series and the incipit of the series (if the tablet was one of a series), often the name of the scribe (and of the owner if two persons were involved), sometimes also the date of writing, and occasionally information about the library or institution for which the tablet was destined. Instructions about the kind of person to whom the tablet was meant to be available might also be given, since some tablets were confidential to a particular class of person. Finally, instructions on the proper care of the tablet might be included.

When the tablet was one of a series—any but the last—it was customary to give the first line of the following tablet immediately after the last line of the tablet just copied and before any colophon. In the modern world this is called a catch-line. It helped the ancient scribe to find the continuation of what he had been reading. Before or instead of a catch-line, a line of what is now called rubric might follow the end of the text before any colophon. This is a line giving the category of text on that tablet. Rubrics are especially common in ritual and cultic texts.

W. G. Lambert

Chronology of Hellenistic Babylonian Rulers

Many of the tablets in this volume date to the Hellenistic era and appear to come from the city of Babylon. The following chronology provides a listing of the main line of rulers claiming or known to have ruled over Babylonia, or portions of it, during that era. For several periods of political and military conflict, precise regnal dates remain difficult to establish. Most significant among these are the period of the Wars of the Successors following the death of Alexander the Great in 323 B.C. and leading to the accession of Seleucus I in 305 B.C. (but who retrojected his accession to 311 B.C.); the period of the Arsacid Parthian conquest of Babylonia, accomplished piecemeal and with numerous reversals of fortune ca. 141–ca. 127 B.C.; and the so-called Parthian Dark Age, ca. 95–ca. 57 B.C., during which time the Parthian nobility frequently stood in opposition to the monarchy. Parthian chronology is further complicated by the custom of its rulers, whose personal names are not always known, to take as their throne name that of the eponymous founder of the dynasty, Arsaces.

In a break with longstanding Babylonian traditions, the early Hellenistic kings counted the year of their accession to the throne as their first regnal year. A further innovation in dating was introduced by Antiochus I, following the death of his father and co-regent, Seleucus I. Antiochus continued his father's regnal count without interruption, thereby establishing the basis of the Seleucid Era, which would remain in use in the Near East for many centuries. In Iran, a similar system was inaugurated counting from the first regnal year of Arsaces I in 247 B.C. Following the Parthian conquest of Babylonia dated cuneiform tablets typically bear the Arsacid Era date and its Seleucid Era equivalent.

330–323 B.C.	Alexander III the Great
323–316 (†317) B.C.	Philip III Arrhidaeus
317–309/8 B.C.	Antigonus Monophthalmus
316–306/5 (†310) B.C.	Alexander IV, son of Alexander
311/(305)–281 B.C.	Seleucus I
294–281 B.C.	Seleucus I and Antiochus, his son
281–267 B.C.	Antiochus I and Seleucus, his son
266 B.C.	Antiochus I and Seleucus and Antiochus, his sons
266–261 B.C.	Antiochus I and Antiochus, his son
261–246 B.C.	Antiochus II
246–226/5 B.C.	Seleucus II
226/5–223/2 B.C.	Seleucus III
223/2–210 B.C.	Antiochus III
210–192 B.C.	Antiochus III and Antiochus, his son
192–189 B.C.	Antiochus III
189–187 B.C.	Antiochus III and Seleucus, his son
187–175 B.C.	Seleucus IV
175 B.C.	Antiochus IV
175–170 B.C.	Antiochus IV and Antiochus, his son
170–164 B.C.	Antiochus IV
164/3–162/1 B.C.	Antiochus V

161–151 B.C.	Demetrius I
150–146 B.C.	Alexander I Balas
145–141 B.C.	Demetrius II
141–139/8 B.C.	Arsaces Mithridates I
139/8–131/0 B.C.	Arsaces Phraates II and Rinnu, his mother
129/8 B.C.	Antiochus VII
128/7 B.C.	Arsaces and Ubulna[. . .]
127 B.C.	Hyspaosines
127–124/3 B.C.	Arsaces Artabanus I
123/2–91 B.C.	Arsaces Mithridates II
90–87/6 B.C.	Arsaces Gotarzes I and Asi(a)batar, his wife
86–81/0 B.C.	Arsaces
80/79–76/5 B.C.	Arsaces Orodes I and Ispubarza, his sister
78/7–70/69 B.C.	Arsaces Sinatruces
68/7–63/2 B.C.	Arsaces Phraates III and Pir(i)ustana, his wife (68/7 B.C.), and Teleonike (63/2 B.C.)
58/7–ca. 39 B.C.	Arsaces Orodes II
ca. 40–3/2 B.C.	Arsaces Phraates IV
3/2 B.C.–4 A.D.	Arsaces Phraates V
4–6 A.D.	Arsaces Orodes III
7–11 A.D.	Arsaces Vonones
10/11–ca. 38 A.D.	Arsaces Artabanus II
ca. 39–47 A.D.	Arsaces Vardanes
38–51 A.D.	Arsaces Gotarzes II
ca. 51–ca. 76/80 A.D.	Arsaces Vologases I
78–109 A.D.	Arsaces Pacorus II
77/8–78/9 A.D.	Arsaces Vologases II
89/90 A.D.	Arsaces Osroes

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Ronald Wallenfels

Abbreviations

Bibliographical Abbreviations

AAA	Annals of Archaeology and Anthropology (Liverpool)
Aaboe, “Seleucid Mathematical Tables”	Asger Aaboe, “Some Seleucid Mathematical Tables (Extended Reciprocals and Squares of Regular Numbers),” <i>JCS</i> 19 (1965), pp. 79–86
AASF	Annales Academiae Scientiarum Fennicae
AB	Assyriologische Bibliothek
	1: (see ASKT)
	13: (see Craig, ABRT 1)
AbB	Altbabylonische Briefe in Umschrift und Übersetzung AbB 4: F[ritz] R. Kraus, <i>Briefe aus dem Archive des Šamaš-Hāzir in Paris und Oxford (TCL 7 und OECT 3)</i> (Leiden, 1968)
ABL	Robert F. Harper, <i>Assyrian and Babylonian Letters belonging to the Kouyunjik Collection of the British Museum I–XIV</i> (London, Chicago, 1892–1914)
ACh Shamash	Ch[arles] Virolleaud, <i>L’Astrologie chaldéenne, le livre intitulé “enuma (Anu) iluBēl,” publié, transcrit et traduit</i> , fasc. 2, 6 ACh Shamash (Paris, 1905, 1907)
ACh Sin	Ch[arles] Virolleaud, <i>L’Astrologie chaldéenne, le livre intitulé “enuma (Anu) iluBēl,” publié, transcrit et traduit</i> , fasc. 1, 5 ACh Sin (Paris, 1908, 1909)
Acta Sum.	Acta Sumerologica (Middle Eastern Culture Center in Japan)
AfO	Archiv für Orientforschung
AHw	Wolfram von Soden, <i>Akkadisches Handwörterbuch</i> , 3 vols. (Wiesbaden, 1965–81)
AJSL	<i>The American Journal of Semitic Languages and Literatures</i>
AMT	Reginald Campbell Thompson, <i>Assyrian Medical Texts</i> (London, 1923)
AnOr	Analecta Orientalia
AnSt	Anatolian Studies
AOAT	Alter Orient und Altes Testament
AoF	Altorientalische Forschungen
AOS	American Oriental Series
ArOr	Archiv Orientální (Journal of the Czechoslovak Oriental Institute, Prague)
AS	Assyriological Studies (University of Chicago) 12: S[amuel] N[oah] Kramer, <i>Lamentation over the Destruction of Ur</i> (Chicago, 1940) 16: <i>Studies in Honor of Benno Landsberger on his Seventy-Fifth Birthday, April 21, 1965</i> (Chicago, 1965) 20: <i>Sumerological Studies in Honor of Thorkild Jacobsen on His Seventieth Birthday, June 7, 1974</i> (Chicago, 1975)

ASKT	Paul Haupt, <i>Akkadische und sumerische Keilschrifttexte nach den Originalen im Britischen Museum copirt und mit einleitenden Zusammenstellungen sowie erklärenden Anmerkungen herausgegeben</i> , AB 1 (Leipzig, 1881–82)
AuOr	<i>Aula Orientalis</i>
AUWE	Ausgrabungen in Uruk-Warka, Endberichte
BA	Beiträge zur Assyriologie und semitischen Sprachwissenschaft (see Macmillan)
Bagh. Mitt.	<i>Baghdader Mitteilungen</i>
BAM	Die babylonisch-assyrische Medizin in Texten und Untersuchungen
	BAM 1: Franz Köcher, <i>Keilschrifttexte aus Assur 1</i> (Berlin, 1963)
	BAM 3: Franz Köcher, <i>Keilschrifttexte aus Assur 3</i> (Berlin, 1964)
	BAM 4: Franz Köcher, <i>Keilschrifttexte aus Assur 4, Babylon, Nippur, Sippar, Uruk und unbekannter Herkunft</i> (Berlin, 1971)
	BAM 5: Franz Köcher, <i>Keilschrifttexte aus Ninive 1</i> (Berlin, 1980)
	BAM 6: Franz Köcher, <i>Keilschrifttexte aus Ninive 2</i> (Berlin, 1980)
BBSt	L[eonard] W. King, <i>Babylonian Boundary-Stones and Memorial-Tablets in the British Museum. With an Atlas of Plates</i> (London, 1912)
BE	The Babylonian Expedition of the University of Pennsylvania, Series A: Cuneiform Texts
	BE 30 Part 1: Hugo Radau, <i>Sumerian Hymns and Prayers to god Dumu-zî or Babylonian Lenten Songs from the Temple Library of Nippur</i> (Munich, 1913)
BIN	Babylonian Inscriptions in the Collection of James B. Nies, Yale University
	BIN 2: James B. Nies and Clarence E. Keiser, <i>Historical, Religious and Economic Texts and Antiquities</i> (New Haven, 1920)
	BIN 8: George G. Hackman, <i>Sumerian and Akkadian Administrative Texts from Predynastic Times to the End of the Akkad Dynasty</i> (New Haven, 1958)
BiOr	<i>Bibliotheca Orientalis</i>
Black, “A-še-er Gi ₆ -ta”	Jeremy A. Black, “A-še-er Gi ₆ -ta, a Balag of Inana,” <i>Acta Sum.</i> 7 (1985), pp. 11–87
Black, “Sumerian <i>Balag</i> Compositions”	Jeremy A. Black, “Sumerian <i>Balag</i> Compositions,” <i>BiOr</i> 44 (1987), pp. 31–80
BMS	Leonard W. King, <i>Babylonian Magic and Sorcery being “the Prayers of the Lifting of the Hand.” The Cuneiform Texts of a Group of Babylonian and Assyrian Incantations and Magical Formulae edited with Transliterations, Translations and Full Vocabulary from Tablets of the Kuyunjik Collections preserved in the British Museum</i> (London, 1896)
Borger, “Schlüssel zu M. E. Cohen, CLAM”	R. Borger, “Schlüssel zu M. E. Cohen, CLAM. ,” <i>BiOr</i> 47 (1990), pp. 5–39
Britton, “Table of 4th Powers”	John. P. Britton, “A Table of 4th Powers and Related Texts from Seleucid Babylon,” <i>JCS</i> 43–45 (1991–93), pp. 71–87

<i>CAD</i>	A. Leo Oppenheim et al., eds., <i>The Assyrian Dictionary of the Oriental Institute of the University of Chicago</i> (Chicago and Glückstadt, 1956–)
Caplice, “Namburbi Texts V”	Richard I. Caplice, “Namburbi Texts in the British Museum: V,” <i>OrNS</i> 40 (1971), pp. 133–83
Cavigneaux, <i>Textes scolaires</i>	Antoine Cavigneaux, <i>Textes scolaires du temple de Nabû ša Harê</i> 1 (Baghdad, 1981)
Cohen, <i>CLAM</i>	Mark E. Cohen, <i>The Canonical Lamentations of Ancient Mesopotamia</i> , 2 vols. (Potomac, Md., 1988)
Cohen, <i>Eršemma</i>	Mark E. Cohen, <i>Sumerian Hymnology: The Eršemma</i> , Hebrew Union College Annual, Suppl. 2 (Cincinnati, 1981)
Cooper, <i>Angim</i>	Jerold S. Cooper, <i>The Return of Ninurta to Nippur: An-gim dím-ma</i> (AnOr 52) (Rome, 1978)
Cooper, “A Sumerian Šu-il-la from Nimrud”	Jerold S. Cooper, “A Sumerian Šu-il-la from Nimrud with a Prayer for Sin-šar-iškun,” <i>Iraq</i> 32 (1970), pp. 51–67
Craig, <i>ABRT</i> 1	James A. Craig, <i>Assyrian and Babylonian Religious Texts</i> 1 (Leipzig, 1895) = AB 13
CRRA	Compte rendu, <i>Rencontre Assyriologique Internationale</i>
CT	Cuneiform Texts from Babylonian Tablets in the British Museum CT 15: Leonard W. King (London, 1902) CT 16: Reginald C. Thompson (London, 1903) CT 17: Reginald C. Thompson (London, 1903) CT 18: Reginald C. Thompson (London, 1904) CT 22: Reginald C. Thompson (London, 1906) CT 24: Leonard W. King (London, 1908) CT 25: Leonard W. King (London, 1909) CT 26: Leonard W. King (London, 1909) CT 30: Percy S. P. Handcock (London, 1911) CT 31: Percy S. P. Handcock (London, 1911) CT 36: C[yril] J. Gadd (London, 1921) CT 38: C[yril] J. Gadd (London, 1925) CT 41: C[yril] J. Gadd (London, 1931) CT 42: H[ugo] H. Figulla (London, 1959) CT 44: Th[eophilus] G. Pinches, <i>Miscellaneous Texts</i> (London, 1963) CT 51: C[hristopher] B. F. Walker, <i>Miscellaneous Texts</i> (London, 1972) CT 56: Th[eophilus] G. Pinches, <i>Neo-Babylonian and Achaemenid Texts</i> (London, 1982)
CTMMA	Cuneiform Texts in The Metropolitan Museum of Art CTMMA 1: Ira Spar, ed., <i>Tablets, Cones, and Bricks of the Third and Second Millennia B.C.</i> (New York, 1988) CTMMA 3: Ira Spar and Eva von Dassow, <i>Private Archive Texts from the First Millennium B.C.</i> (New York, 2000)

CTN	Cuneiform Texts from Nimrud CTN 4: D[onald] J. Wiseman and J[eremy] A. Black, <i>Literary Texts from the Temple of Nabû</i> (London, 1996)
van Dijk, <i>Lugale</i>	J[ohannes] J[acobus] A[drianus] van Dijk, <i>LUGAL UD ME-LÁM-bi NIR-ĜÁL: Le récit épique et didactique des Travaux de Ninurta, du Déluge et de la Nouvelle Création</i> , 2 vols. (Leiden, 1983)
van Dijk, <i>Texte aus dem Rēš-Heiligtum</i>	Jan van Dijk and Werner R. Mayer, <i>Texte aus dem Rēš-Heiligtum in Uruk-Warka</i> , Bagh. Mitt., Suppl. 2 (Berlin, 1980)
FAOS	Freiburger altorientalische Studien
de Genouillac, <i>Kich</i> 2	Henri de Genouillac, <i>Premières recherches archéologiques à Kich: (Fouilles françaises d'El-Âkhymer, Mission d'Henri de Genouillac, 1911–12)</i> , 2 (Paris, 1925)
George, <i>BTT</i>	A[ndrew] R. George, <i>Babylonian Topographical Texts</i> , Orientalia Lovaniensia Analecta 40 (Leuven, Belgium, 1992)
George, <i>House Most High</i>	A[ndrew] R. George, <i>House Most High: The Temples of Ancient Mesopotamia</i> (Winona Lake, 1993)
Gesche, <i>Schulunterricht</i>	Petra D. Gesche, <i>Schulunterricht in Babylonien im ersten Jahrtausend v. Chr.</i> (Munich, 2000)
HUCA	<i>Hebrew Union College Annual</i>
Hunger, <i>Kolophone</i>	Hermann Hunger, <i>Babylonische und assyrische Kolophone</i> , AOAT 2 (Neukirchen-Vluyn, 1968)
Hunger, <i>SpTU</i> 1	H[ermann] Hunger, <i>Spätbabylonische Texte aus Uruk</i> 1, Ausgrabungen der Deutschen Forschungsgemeinschaft in Uruk-Warka (Berlin, 1976)
Jacoby, <i>FGH</i>	Felix Jacoby, <i>Die Fragmente der griechischen Historiker</i> 1–3 (Berlin 1923–58)
JAOS	<i>Journal of the American Oriental Society</i>
JCS	<i>Journal of Cuneiform Studies</i>
JEOL	<i>Jaarbericht van het Vooraziatisch-Egyptisch Genootschap "Ex Oriente Lux"</i>
JNES	<i>Journal of Near Eastern Studies</i>
JSOR	<i>Journal of the Society of Oriental Research</i>
JSS	<i>Journal of Semitic Studies</i>
KAR	Erich Ebeling, <i>Keilschrifttexte aus Assur religiösen Inhalts</i> 1, WVDOG 28 (Leipzig, 1915–19)
KAV	Otto Schroeder, <i>Keilschrifttexte aus Assur verschiedenen Inhalts</i> , WVDOG 35 (Leipzig, 1920)
Köcher, <i>Pflanzenkunde</i>	Franz Köcher, <i>Keilschrifttexte zur assyrisch-babylonischen Drogen- und Pflanzenkunde, Text der Serien uru.an.na : maltakal, ḪAR.ra : ḫubullu und Ú GAR-šú</i> , VIO 28 (Berlin, 1955)
Krecher, <i>Kultlyrik</i>	Joachim Krecher, <i>Sumerische Kultlyrik</i> (Wiesbaden, 1966)
Lambert, <i>BWL</i>	W. G. Lambert, <i>Babylonian Wisdom Literature</i> (Oxford, 1960)
Langdon, <i>BL</i>	Stephen [H.] Langdon, <i>Babylonian Liturgies</i> (Paris, 1913)

<i>LBAT</i>	T[heophilus] G. Pinches, <i>Late Babylonian Astronomical and Related Texts, Copied by T. G. Pinches and J. N. Strassmaier. Prepared for Publication by A. J. Sachs with the co-operation of J. Schaumberger</i> (Providence, 1955)
Leichty et al., <i>A Scientific Humanist</i>	Erle Leichty, Maria deJ. Ellis, and Pamela Gerardi, eds., <i>A Scientific Humanist. Studies in Memory of Abraham Sachs</i> , Occasional Publications of the Samuel Noah Kramer Fund, 9 (Philadelphia, 1988)
Macmillan, <i>Religion of Babylonia and Assyria</i> , BA 5	Kerr Duncan Macmillan, <i>Some Cuneiform Tablets bearing on the Religion of Babylonia and Assyria</i> , BA 5 (Leipzig, 1906), pp. 531–712
MAD	Materials for the Assyrian Dictionary MAD 1: I[gnace] J. Gelb, <i>Sargonic Texts from the Diyala Region</i> (Chicago, 1952) MAD 3: I[gnace] J. Gelb, <i>Glossary of Old Akkadian</i> (Chicago, 1957)
<i>MARI</i>	<i>Mari, Annales de recherches interdisciplinaires</i>
Maul, “Frühjahrsfeierlichkeiten”	Stefan M. Maul, “Die Frühjahrsfeierlichkeiten in Aššur,” in A. R. George and I. L. Finkel, eds., <i>Wisdom, Gods and Literature: Studies in Assyriology in Honour of W. G. Lambert</i> (Winona Lake, 2000)
Maul, “Herzberuhigungsklagen”	Stefan M. Maul, ‘Herzberuhigungsklagen,’ <i>Die sumerisch-akkadischen Eršahunga-Gebete</i> (Wiesbaden, 1988)
Maul, “Wenn der Held”	Stefan M. Maul, “‘Wenn der Held (zum Kampfe) auszieht . . .’ Ein Ninurta-Eršemma,” <i>OrNS</i> 60 (1991), pp. 312–34
<i>MCT</i>	O[tto] Neugebauer and A[braham J.] Sachs, <i>Mathematical Cuneiform Texts</i> , AOS 29 (New Haven, 1945)
<i>MDOG</i>	<i>Mitteilungen der deutschen Orient-Gesellschaft</i>
<i>MIO</i>	<i>Mitteilungen des Instituts für Orientforschung</i>
<i>MKT</i>	Otto Neugebauer, <i>Mathematische Keilschrifttexte</i> 1–3 (Berlin 1935–37)
MSL	Materialien zum sumerischen Lexikon/Materials for the Sumerian Lexicon MSL 3: B[enno] Landsberger, <i>Das Syllabar A</i> (R[ichard] T. Hallock)— <i>Das Vokabular S^a</i> (B[enno] Landsberger, R[ichard] T. Hallock)— <i>Das Vokabular S^b</i> (H[ans] S[iegfried] Schuster, B[enno] Landsberger)— <i>Berichtigungen und Nachträge zu MSL II</i> (B[enno] Landsberger)— <i>Indices zu MSL II</i> (A[braham] Sachs, B[enno] Landsberger) (Rome, 1955) MSL 4: B[enno] Landsberger, <i>Neobabylonian Grammatical Texts—Nachträge zu MSL III</i> (Rome, 1956) MSL 5: B[enno] Landsberger, <i>The Series ḪAR-ra = hubullu, Tablets I–IV</i> (Rome, 1957) MSL 6: B[enno] Landsberger, <i>The Series ḪAR-ra = hubullu, Tablets V–VII</i> (Rome, 1957) MSL 7: B[enno] Landsberger, <i>The Series ḪAR-ra = hubullu, Tablets VIII–XII</i> (Rome, 1959)

- MSL 8/1: B[enno] Landsberger, *The Fauna of Ancient Mesopotamia: First Part Tablet XIII* (Rome, 1960)
- MSL 8/2: B[enno] Landsberger, *The Fauna of Ancient Mesopotamia: Second Part HAR-ra = hubullu, Tablets XIV and XVIII* (Rome, 1962)
- MSL 9: Benno Landsberger and Miguel Civil, *The Series HAR-ra = hubullu, Tablet XV and Related Texts* (Rome, 1967)
- MSL 10: Benno Landsberger, Erica Reiner, and Miguel Civil, *The Series HAR-ra = hubullu, Tablets XVII–XIX and Related Texts* (Rome, 1970)
- MSL 11: Erica Reiner, ed. with the collaboration of Miguel Civil, *The Series HAR-ra = hubullu Tablets XX–XXIV* (Rome, 1974)
- MSL 12: M[iguel] Civil, ed., with the collaboration of R[obert] D. Biggs, H[ans] G. Güterbock, H[ans] J. Nissen, and E[rica] Reiner, *The Series lú = ša and Related Texts* (Rome, 1969)
- MSL 13: Miguel Civil, ed., with the collaboration of Hans G. Güterbock, William W. Hallo, Harry A. Hoffner, and Erica Reiner, *Izi = išātu, Ká-gal = abullu and Níg-ga = makkūru* (Rome, 1971)
- MSL 14: Miguel Civil, ed., with the collaboration of Margaret W. Green and W. G. Lambert, *Ea A = nāqu, Aa A = nāqu, with their Forerunners and Related Texts* (Rome, 1979)
- MSL 16: Irving L. Finkel with the collaboration of Miguel Civil, eds., *The Series SIG₇.ALAN = Nabnītu* (Rome, 1982)
- MSL 17: Antoine Cavigneaux, Hans G. Güterbock, and Martha T. Roth, with the assistance of Gertrud Farber, eds., *The Series Erim-ḥuš = anantu and An-ta-gál = šaqū* (Rome, 1985)
- NABU*
Neugebauer, ACT
- Nouvelles assyriologiques brèves et utilitaires*
- Otto Neugebauer, *Astronomical Cuneiform Texts: Babylonian Ephemerides of the Seleucid Period for the Motion of the Sun, the Moon, and the Planets 1–3* (London, 1955)
- OECT*
Oxford Editions of Cuneiform Texts
- OECT 3: G[odfrey] R. Driver, *Letters of the First Babylonian Dynasty* (Oxford, 1924)
- OECT 5: Oliver R. Gurney and Samuel Noah Kramer, *Sumerian Literary Texts in the Ashmolean Museum* (Oxford, 1976)
- OECT 6: S[tephen H.] Langdon, *Babylonian Penitential Psalms, to which are added Fragments of the Epic of Creation from Kish in the Weld Collection of the Ashmolean Museum, Excavated by the Oxford-Field Museum Expedition* (Paris, 1927)
- OECT 9: Gilbert J. P. McEwan, *Texts from Hellenistic Babylonia in the Ashmolean Museum* (Oxford, 1982)
- OECT 11: O[liver] R. Gurney, *Literary and Miscellaneous Texts in the Ashmolean Museum* (Oxford, 1989)
- OLA*
Orientalia Lovaniensia Analecta

Oelsner, "Randbemerkungen zur arsakidischen Geschichte"	Joachim Oelsner, "Randbemerkungen zur arsakidischen Geschichte anhand von babylonischen Keilschrifttexten," <i>AoF</i> 3 (1975), pp. 25–45
OrNS	<i>Orientalia, New Series</i> (Rome, 1932–)
PBS	Publications of the Babylonian Section, University Museum, University of Pennsylvania
	PBS I/1: David W. Myhrman, <i>Babylonian Hymns and Prayers</i> (Philadelphia, 1911)
Pinches, "Additions and Corrections"	T[heophilus] G. Pinches, "Additions and Corrections," in H[enry] C. Rawlinson, IV R, Second Edition (London, 1891), pp. 1–12
PSBA	<i>Proceedings of the Society of Biblical Archaeology</i>
PSD	Åke W. Sjöberg, ed., <i>The Sumerian Dictionary of the University Museum of the University of Pennsylvania</i> (Philadelphia, 1984–)
I R	H[enry] C. Rawlinson and Edwin Norris, <i>The Cuneiform Inscriptions of Western Asia I: A Selection from the Historical Inscriptions of Chaldaea, Assyria, and Babylonia</i> (London, 1861)
IV R ²	H[enry] C. Rawlinson, <i>The Cuneiform Inscriptions of Western Asia, Vol. IV: A Selection from the Miscellaneous Inscriptions of Assyria, Prepared . . . by . . . Sir H. C. Rawlinson . . .</i> , Second Edition (London, 1891)
V R	Theophilus G. Pinches, <i>The Cuneiform Inscriptions of Western Asia, Vol. V: A Selection from the Miscellaneous Inscriptions of Assyria and Babylonia, Prepared . . . by . . . Sir H. C. Rawlinson . . . Assisted by Theophilus G. Pinches . . .</i> (London, 1880, 1884)
RA	<i>Revue d'assyriologie et d'archéologie orientale</i>
RAcc	F[rançois] Thureau-Dangin, <i>Rituels accadiens</i> (Paris, 1921)
RLA	<i>Reallexikon der Assyriologie</i> , Erich Ebeling, Bruno Meissner et al., eds. (Leipzig, 1932–)
Sachs-Hunger, <i>Astronomical Diaries</i>	Abraham J. Sachs and Hermann Hunger, <i>Astronomical Diaries and Related Texts from Babylonia</i> 1: <i>Diaries from 652 B.C. to 262 B.C.</i> , Österreichische Akademie der Wissenschaften, Philosophisch-historische Klasse (Vienna, 1988) 2: <i>Diaries from 261 B.C. to 165 B.C.</i> (Vienna, 1989) 3: <i>Diaries from 164 B.C. to 61 B.C.</i> (Vienna, 1996)
SANE	Sources from the Ancient Near East (Malibu)
SBH	George A. Reisner, <i>Sumerisch-babylonische Hymnen nach Thontafeln griechischer Zeit</i> , Mittheilungen aus den orientalischen Sammlungen 10 (Berlin, 1896)
StOr	<i>Studia Orientalia</i> (Societas Orientalis Fennica)
STC 2	Leonard W. King, <i>The Seven Tablets of Creation, or the Babylonian and Assyrian Legends concerning the Creation of the World and of Mankind. II Supplementary texts</i> (London, 1902)
STT	O[liver] R. Gurney and P[eter] Hulin, <i>The Sultantepe Tablets 2, Occasional Publications of the British Institute of Archaeology at Ankara 3</i> (London, 1964)

<i>Studies Kramer</i>	Barry L. Eichler, ed., with the assistance of Jane W. Heimerdinger and Åke W. Sjöberg, <i>Kramer Anniversary Volume: Cuneiform Studies in Honor of Samuel Noah Kramer</i> , AOAT 25 (Kevelaer, 1976)
TCL	<p>Textes cunéiformes du Louvre</p> <p>TCL 6: F[rançois] Thureau-Dangin, <i>Tablettes d'Uruk à l'usage des prêtres du temple d'Anu au temps des Séleucides</i> (Paris, 1922)</p> <p>TCL 7: F[rançois] Thureau-Dangin, <i>Lettres de Hammurapi à Šamaš-hâsîr</i> (Paris, 1924)</p> <p>TCL 13: G[eorges] Contenau, <i>Contrats néo-babyloniens 2 (Achéménides et Séleucides)</i> (Paris, 1929)</p> <p>TCL 16: H[enri] de Genouillac, <i>Textes religieux sumériens du Louvre 2</i> (Paris, 1930)</p>
TCS	Texts from Cuneiform Sources
	<p>TCS 3: Åke W. Sjöberg and E[eugen] Bergman, <i>The Collection of the Sumerian Temple Hymns</i>, and Gene B. Gragg, <i>The Kesh Temple Hymn</i> (Locust Valley, N.Y., 1969)</p> <p>TCS 4: Erle Leichty, <i>The Omen Series Šumma Izbu</i> (Locust Valley, N.Y., 1970)</p>
TIM	Texts in the Iraq Museum
	<p>TIM 9: J[ohannes Jacobus Adrianus] van Dijk, <i>Cuneiform Texts of Varying Content</i> (Leiden, 1976)</p>
UET	<p>Ur Excavation Texts: Publications of the Joint Expedition of the British Museum and of the University Museum, University of Pennsylvania, Philadelphia, to Mesopotamia</p> <p>UET 6/2: C[yril] J. Gadd and S[amuel] N[oah] Kramer, <i>Literary and Religious Texts</i> (London, 1966)</p> <p>UET 7: Oliver R. Gurney, <i>Middle Babylonian Legal Documents and Other Texts</i> (London, 1974)</p>
UF	Ugarit-Forschungen
UVB	Vorläufiger Bericht über die von dem Deutschen Archäologischen Institut und der Deutschen Orient-Gesellschaft aus Mitteln der Deutschen Forschungsgemeinschaft unternommenen Ausgrabungen in Uruk-Warka (Berlin, 1930–)
	<p>UVB 15: Heinrich J. Lenzen (Berlin, 1959)</p> <p>UVB 18: Heinrich J. Lenzen (Berlin, 1962)</p>
Vaiman, <i>SBM</i>	A[isik] A. Vaiman, <i>Sumero-Vavilonskaya Matematika, III-I tysyačletiya, do n.e.</i> (Moscow, 1961)
VIO	Veröffentlichungen des Instituts für Orientforschung, Berlin 28 (see Köcher, <i>Pflanzenkunde</i>)
von Weiher, <i>SpTU 2</i>	Egbert von Weiher, <i>Spätbabylonische Texte aus Uruk</i> , pt. 2, Ausgrabungen der Deutschen Forschungsgemeinschaft in Uruk-Warka 10 (Berlin, 1983)

von Weiher, <i>SpTU</i> 3	Egbert von Weiher, <i>Spätbabylonische Texte aus Uruk</i> , pt. 3, Ausgrabungen der Deutschen Forschungsgemeinschaft in Uruk-Warka 12 (Berlin, 1988)
von Weiher, <i>SpTU</i> 4	Egbert von Weiher, <i>Uruk. Spätbabylonische Texte aus dem Planquadrat U 18</i> , pt. 4, Ausgrabungen in Uruk-Warka, Endberichte 12 (Mainz am Rhein, 1993)
VS	Vorderasiatische Schriftdenkmäler der Königlichen [later: Staatlichen] Museen zu Berlin
	VS 2: Heinrich Zimmern, <i>Sumerische Kultlieder aus altabylonischer Zeit</i> , first series (Leipzig, 1912)
	VS 10: Heinrich Zimmern, <i>Sumerische Kultlieder aus altabylonischer Zeit</i> , second series (Leipzig, 1913)
	VS 17: Jan van Dijk, <i>Nicht-kanonische Beschwörungen und sonstige literarische Texte</i> (Berlin, 1971)
	VS 24: Jan van Dijk, <i>Literarische Texte aus Babylon</i> (= N.f. 8, Berlin, 1987)
WO	<i>Die Welt des Orients</i>
WVDOG	Wissenschaftliche Veröffentlichungen der Deutschen Orient-Gesellschaft
WZKM	Wiener Zeitschrift für die Kunde des Morgenlandes
YNER	Yale Near Eastern Researches
YOS	Yale Oriental Series, Babylonian Texts
	YOS 14: Stephen D. Simmons, <i>Early Old Babylonian Documents</i> (New Haven, 1978)
ZA	<i>Zeitschrift für Assyriologie und vorderasiatische Archäologie</i>

Additional Abbreviations

a.	Ancestor of
Akk.	Akkadian
AO	Cuneiform tablets in the collections of the Musée du Louvre, Paris
Arab.	Arabic
Ass.	Cuneiform tablets from Ashur (in the collections of the Vorderasiatische Museum, Berlin) and in the Istanbul Archaeological Museum
BE	Cuneiform tablets from the Babylon-Expedition (in the collections of the Vorderasiatische Museum, Berlin)
BM	Cuneiform tablets in the collections of the British Museum, London
Bu	Cuneiform tablets in the collections of the British Museum, London
CBS	Cuneiform tablets in the collections of the University Museum of the University of Pennsylvania, Philadelphia
col.	Column
coll.	Collated
d.	Descendant of
DT	Cuneiform tablets in the Daily Telegraph collection of the British Museum, London
EAH	Cuneiform tablets in the E. A. Hoffman collection, General Theological Seminary, New York City (now housed in the Yale Babylonian Collection, New Haven)

EHE	Cuneiform tablets in the École pratique des Hautes Études collection, Paris
Ešḥ	Eršahunga
HS	Cuneiform tablets in the Hilprecht collection, Friedrich-Schiller-University, Jena
IM	Cuneiform tablets in the collections of the Iraq Museum, Baghdad
l.	Line
LB	Late Babylonian
L.E.	Left edge
Liv.	Cuneiform tablets in the Free Public Museum, Liverpool, England
Lo.E.	Lower edge (of obverse)
MB	Middle Babylonian
MLC	Cuneiform tablets in the collections of the Pierpont Morgan Library
MM	Cuneiform tablets in the collections of the Monserrat Museum, Barcelona
MMA	The Metropolitan Museum of Art
No.	Number of text in this volume
ND	Field numbers of tablets excavated at Nimrud
OB	Old Babylonian
obv.	Obverse
pl.	Plate
rev.	Reverse
R.E.	Right edge
Rm	Cuneiform tablets in the Rassam collection of the British Museum, London
s.	Son of
S.E.	Seleucid era
SH	Cuneiform tablets in the Shemtob collection of the British Museum, London
Sm	Cuneiform tablets in the Smith collection of the British Museum, London
Sp	Cuneiform tablets in the Spartoli collection of the British Museum, London
Sum.	Sumerian
U.E.	Under edge (of reverse)
Up.E.	Upper Edge (of obverse)
UH	UDUG.ḪUL = <i>Utukku lemnūtu</i> (see text Nos. 25–29)
VAT	Cuneiform tablets in the collections of the Staatliche Museen, Berlin
W	Field number of cuneiform tablets excavated at Warka

Symbols

+	Join of tablet fragments
(+)	Indication that fragments are part of the same tablet, but no physical join is evident
x	Illegible sign or reading uncertain
()	In the transliteration, the existence of the enclosed sign(s) is uncertain; in the translation, the enclosed words are added to provide a clearer meaning
(?)	Transliteration or translation of the sign or word is uncertain
(!)	Text is emended; sign on the tablet is corrected in the transliteration
<>	Text is emended; enclosed sign(s) are added to the transliteration
«»	Text is emended; in the transliteration enclosed sign(s) are deleted
{ }	In the transliteration, the sign present on the tablet is judged to be wrongly present
[]	Tablet is damaged or broken; enclosed text is restored
[x x]	Tablet is damaged or broken; space exists for x number of signs in brackets
[. .]	Tablet is damaged or broken; the number of dots refers to the number of signs not preserved
[-]	Tablet is damaged or broken; text is partially preserved
	Erasure
	Tablet is damaged or broken
	Partial erasure of sign or scribal error
	Text inscribed with a frayed or broken stylus

Catalogue of Tablets

Text No.	Museum No.	City	Year	Description
1	86.11.62			Old Babylonian Balag to the Mother Goddess Aruru
2	86.11.347 + [SBH 35 (VAT 418 + VAT 424 + VAT 1744 + unnumbered fragment)]	Babylon	S.E. 178	Balag: abzu pe-el-lá-àm, to Enki
3	86.11.182	Babylon	S.E. 167	Balag: ^d Utu-gin ₇ è-ta, to Enlil
4	86.11.349 + 86.11.365	(Babylon)		Balag: nir-gál lú è-NE, to Ninurta
5	86.11.348 + SBH 82 (VAT 231)	(Babylon)	S.E. 137/ 138	Balag: im-ma-al-(la) gù dé-dé
6	86.11.279	(Babylon)		Balag
7	86.11.286A + 86.11.286B + 86.11.529 + SBH 63 (VAT 210)	(Babylon)		Balag: a-še-er gi ₆ -ta, to Innn/Ishtar
8	86.11.346 + SBH 60 + (VAT 370[!]) SBH 84 + (VAT 1831)	(Babylon)	A.E. 117 or 118	Balag: a abzu-mu
9	86.11.289	(Babylon)		Balag: Unidentified, to Nergal(?)
10	86.11.350	(Babylon)		Balag: Unidentified, to Innn/Ishtar(?)
11	86.11.360 + 86.11.517 + 86.11.544 + 86.11.546 + 86.11.551 + 86.11.553 + 86.11.555 + SBH 50 (VAT 581 (+) VAT 415)			Balag: Unidentified
12	86.11.300	Babylon	S.E. 177	Balag: Colophon Fragment
13	86.11.351	(Babylon)		Eršemma: dilmun ^{ki} nigin-na, to Marduk
14	86.11.288 + 86.11.557	(Babylon)		Collection of Eršemmas (nos. 45, 59, 53)
15	86.11.298 + SBH 74 (VAT 268 + VAT 443)	(Babylon)		Šuilla: nir-gál lú è-NE
16	86.11.285	(Babylon)		Emesal Prayer
17	86.11.476	(Babylon)		Fragment of an Emesal Prayer
18	86.11.313			Hymn to Marduk
19	86.11.419 + 86.11.483 (+) 86.11.538			Fragments of a Solid Clay Barrel Cylinder with Unidentified Hymn

Text No.	Museum No.	City	Year	Description
20	86.11.376A (+) 86.11.376B	(Babylon?)		Ritual
21	86.11.359			Ritual Fragment
22	86.11.372A	(Babylon)	S.E. 155	Letter about Cultic Matters
23	86.11.414			Theological Text Fragment
24	86.11.399			Prayer for a King
25	86.11.379A, C, D, E + 86.11.468 (+) 86.11.379F	(Babylon)		<i>Utukku lemnu</i> , Tablet 3
26	86.11.366 + 86.11.542	(Babylon)		<i>Utukku lemnu</i> , Tablet 12
27	86.11.367 + 86.11.486 (+) 86.11.537	(Babylon)		<i>Utukku lemnu</i> , Tablet 12
28	86.11.379B + 86.11.534	(Babylon)		<i>Utukku lemnu</i> , Tablet 12
29	86.11.382A, B, C	(Babylon)		<i>Utukku lemnu</i> , Tablet 16
30	86.11.130	(Sippar)		Gula Incantation
31	86.11.426 + 86.11.474 + 86.11.479			Treatments for the Nose and Mouth
32	86.11.64			List of Magical Stones
33	56.81.52			Fragment of a Neo-Assyrian Medical Text
34	86.11.378B			Fragment of a Liver Omen
35	86.11.549			Fragment of a Liver Omen
36	86.11.353			<i>Enūma Anu Enlil</i> , Tablets 26, 27
37	86.11.303			<i>Enūma Anu Enlil</i> , Excerpts
38	86.11.287D			Fragment Regarding the Visibility of Mercury
39	86.11.356			<i>Šumma ālu</i> , Tablet 17
40	86.11.383A	(Babylon?)		<i>Šumma izbu</i> , Tablet 5
41	86.11.383B (+) 86.11.383F (+ 86.11.383G (+) 86.11.383H	(Babylon?)		<i>Šumma izbu</i> , Tablet 5
42	86.11.378A			Atra-ḥasis
43	86.11.459			Fragment of Lugal-e, Tablet 7
44	86.11.370A, C + 86.11.383C, D, E	Babylon		Letter of Sîn-šarra-iškun to Nabopolassar
45	86.11.375A (+) 86.11.375B (+) 86.11.558			S ^a Fragment
46	86.11.528			S ^a Fragment
47	86.11.533			S ^a Fragment
48	86.11.530			S ^a Fragment
49	86.11.470			S ^a Fragment
50	86.11.531			S ^b Fragment

XXXVI CUNEIFORM TEXTS IN THE METROPOLITAN MUSEUM OF ART II

Text No.	Museum No.	City	Year	Description
51	86.11.532			S ^b Fragment
52	86.11.490			S ^b Fragment
53	86.11.510			S ^b Fragment
54	86.11.364			Number-Syllabary
55	86.11.121			Bilingual Vocabulary of Domestic Animals, Urra = <i>hubullu</i> , Tablet 13
56	86.11.368			A Vocabulary of Food and Drink Terms, Urra = <i>hubullu</i> , Tablet 23
57	86.11.435			Fragment of a School Exercise Tablet, Urra = <i>hubullu</i> , Tablet 1
58	86.11.301			Fragment of a School Exercise Tablet, Urra = <i>hubullu</i> , Tablets 14, 20, 21
59	86.11.358			Fragment of a School Exercise Tablet, Urra = <i>hubullu</i> , Tablet 3
60	86.11.377B			Fragment of a School Exercise Tablet, Urra = <i>hubullu</i> , Tablet 3
61	86.11.61	Babylon		Late Babylonian Grammatical Text
62	86.11.357			Fragment of the Weidner God List
63	86.11.371A (+) 86.11.371B + 86.11.371C (+) 86.11.371D (+) 86.11.371E			Akkadian Synonym List, <i>Malku</i> = <i>šarru</i> , Tablet 3
64	86.11.377A			Akkadian Synonym List, <i>Malku</i> = <i>šarru</i> , Tablet 5
65	86.11.362	(Babylon)		School Exercise Tablet
66	86.11.361	(Babylon)		School Exercise Tablet
67	86.11.336			Inscription on a Clay Ball
68	86.11.102			Measurements of the Interior of the E-sagil Temple
69	86.11.109			Explanatory Commentary on a List of Materia Medica
70	86.11.287E			Medical Commentary(?)
71	86.11.287A, B, C + 86.11.503			Commentary on <i>Enūma Anu Enlil</i> , Tablet 5
72	86.11.407			Fragment of a Table of Reciprocals
73	86.11.408			Fragment of a Table of Reciprocals
74	86.11.409			Fragment of a Table of Reciprocals
75	86.11.406			Fragment of a Table of Reciprocals
76	86.11.410			Fragment of a Table of Reciprocals
77	86.11.404			Fragment of a Mathematical Problem Text
78	86.11.337	(Babylon)		Fragment of a List of <i>Ziqpu</i> -Stars

Text No.	Museum No.	City	Year	Description
79	86.11.405	(Babylon)		Ephemeris of New and Full Moons for S.E. 263
80	86.11.345	(Babylon)		Ephemeris of Eclipses from at least S.E. 177 to 199(?)
81	86.11.363	(Babylon)		Procedure Text for the Moon
82	86.11.369	(Babylon)		Normal Star Almanac for S.E. 70
83	86.11.354	(Babylon)		Almanac for A.D. 31/32
84	86.11.374A, B			Fragment of an Astronomical Table(?)
85	86.11.374D			Fragment of a Table Containing Numbers
86	86.11.374C			Unidentified Fragment
87	86.11.411A, B + 86.11.497			Lunar Procedure Text(?)
88	86.11.411C			Unidentified Fragment
89	86.11.418			Unidentified Fragment
90	86.11.370B			Unidentified Fragment
91	86.11.473			Unidentified Fragment
92	86.11.471			Unidentified Fragment
93	86.11.462			Unidentified Fragment
94	86.11.383I			Unidentified Fragment
95	86.11.444			Bilingual Unidentified Fragment
96	86.11.373B			Bilingual Unidentified Fragment
97	86.11.506			Bilingual(?) Unidentified Fragment
98	86.11.448 + 86.11.512			Fragment of a Text Containing Incantations
99	86.11.541			Fragment of an Exercise Tablet
100	86.11.489			Fragment, Content Uncertain
101	86.11.493			Fragment, Content Uncertain
102	86.11.432			Fragment, Content Uncertain
103	86.11.552			Fragment, Content Uncertain
104	86.11.509			Fragment, Content Uncertain
105	86.11.521			Fragment, Content Uncertain
106	86.11.548			Fragment, Content Uncertain

Concordance of Tablets

MMA Acc. No.	Text No.	Credit Line
86.11.61	61	Purchase, 1886
86.11.62	1	Purchase, 1886
86.11.64	32	Purchase, 1886
86.11.102	68	Purchase, 1886
86.11.109	69	Purchase, 1886
86.11.121	55	Purchase, 1886
86.11.130	30	Purchase, 1886
86.11.182	3	Purchase, 1886
86.11.279	6	Purchase, 1886
86.11.285	16	Purchase, 1886
86.11.286A	7	Purchase, 1886
86.11.286B	7	Purchase, 1886
86.11.287A,B,C	71	Purchase, 1886
86.11.287D	38	Purchase, 1886
86.11.287E	70	Purchase, 1886
86.11.288	14	Purchase, 1886
86.11.289	9	Purchase, 1886
86.11.298	15	Purchase, 1886
86.11.300	12	Purchase, 1886
86.11.301	58	Purchase, 1886
86.11.303	37	Purchase, 1886
86.11.313	18	Purchase, 1886
86.11.336	67	Purchase, 1886
86.11.337	78	Purchase, 1886
86.11.345	80	Purchase, 1886
86.11.346	8	Purchase, 1886
86.11.347	2	Purchase, 1886
86.11.348	5	Purchase, 1886
86.11.349	4	Purchase, 1886
86.11.350	10	Purchase, 1886
86.11.351	13	Purchase, 1886
86.11.353	36	Purchase, 1886
86.11.354	83	Purchase, 1886

MMA Acc. No.	Text No.	Credit Line
86.11.356	39	Purchase, 1886
86.11.357	62	Purchase, 1886
86.11.358	59	Purchase, 1886
86.11.359	21	Purchase, 1886
86.11.360	11	Purchase, 1886
86.11.361	66	Purchase, 1886
86.11.362	65	Purchase, 1886
86.11.363	81	Purchase, 1886
86.11.364	54	Purchase, 1886
86.11.365	4	Purchase, 1886
86.11.366	26	Purchase, 1886
86.11.367	27	Purchase, 1886
86.11.368	56	Purchase, 1886
86.11.369	82	Purchase, 1886
86.11.370A	44	Purchase, 1886
86.11.370B	90	Purchase, 1886
86.11.370C	44	Purchase, 1886
86.11.370D	44	Purchase, 1886
86.11.370E	44	Purchase, 1886
86.11.371A	63	Purchase, 1886
86.11.371B	63	Purchase, 1886
86.11.371C	63	Purchase, 1886
86.11.371D	63	Purchase, 1886
86.11.371E	63	Purchase, 1886
86.11.372A	22	Purchase, 1886
86.11.373B	96	Purchase, 1886
86.11.374A	84	Purchase, 1886
86.11.374B	84	Purchase, 1886
86.11.374C	86	Purchase, 1886
86.11.374D	85	Purchase, 1886
86.11.375A	45	Purchase, 1886
86.11.375B	45	Purchase, 1886
86.11.376A	20	Purchase, 1886
86.11.376B	20	Purchase, 1886
86.11.377A	64	Purchase, 1886
86.11.377B	60	Purchase, 1886
86.11.378A	42	Purchase, 1886
86.11.378B	34	Purchase, 1886
86.11.379A	25	Purchase, 1886

MMA Acc. No.	Text No.	Credit Line
86.11.379B	28	Purchase, 1886
86.11.379C	25	Purchase, 1886
86.11.379D	25	Purchase, 1886
86.11.379E	25	Purchase, 1886
86.11.379F	25	Purchase, 1886
86.11.382A, B	29	Purchase, 1886
86.11.382C	29	Purchase, 1886
86.11.383A	40	Purchase, 1886
86.11.383B	41	Purchase, 1886
86.11.383C	44	Purchase, 1886
86.11.383D	44	Purchase, 1886
86.11.383E	44	Purchase, 1886
86.11.383F	41	Purchase, 1886
86.11.383G	41	Purchase, 1886
86.11.383H	41	Purchase, 1886
86.11.383I	94	Purchase, 1886
86.11.399	24	Purchase, 1886
86.11.404	77	Purchase, 1886
86.11.405	79	Purchase, 1886
86.11.406	75	Purchase, 1886
86.11.407	72	Purchase, 1886
86.11.408	73	Purchase, 1886
86.11.409	74	Purchase, 1886
86.11.410	76	Purchase, 1886
86.11.411A	87	Purchase, 1886
86.11.411B	87	Purchase, 1886
86.11.411C	88	Purchase, 1886
86.11.414	23	Purchase, 1886
86.11.418	89	Purchase, 1886
86.11.419	19	Purchase, 1886
86.11.426	31	Purchase, 1886
86.11.432	102	Purchase, 1886
86.11.435	57	Purchase, 1886
86.11.444	95	Purchase, 1886
86.11.448	98	Purchase, 1886
86.11.459	43	Purchase, 1886
86.11.462	93	Purchase, 1886
86.11.468	25	Purchase, 1886
86.11.470	49	Purchase, 1886

MMA Acc. No.	Text No.	Credit Line
86.11.471	92	Purchase, 1886
86.11.473	91	Purchase, 1886
86.11.474	31	Purchase, 1886
86.11.476	17	Purchase, 1886
86.11.479	31	Purchase, 1886
86.11.483	19	Purchase, 1886
86.11.486	27	Purchase, 1886
86.11.489	100	Purchase, 1886
86.11.490	52	Purchase, 1886
86.11.493	101	Purchase, 1886
86.11.497	87	Purchase, 1886
86.11.503	71	Purchase, 1886
86.11.506	97	Purchase, 1886
86.11.509	104	Purchase, 1886
86.11.510	53	Purchase, 1886
86.11.517	11	Purchase, 1886
86.11.521	105	Purchase, 1886
86.11.528	46	Purchase, 1886
86.11.529	7	Purchase, 1886
86.11.530	48	Purchase, 1886
86.11.531	50	Purchase, 1886
86.11.532	51	Purchase, 1886
86.11.533	47	Purchase, 1886
86.11.534	28	Purchase, 1886
86.11.537	27	Purchase, 1886
86.11.538	19	Purchase, 1886
86.11.541	99	Purchase, 1886
86.11.542	26	Purchase, 1886
86.11.544	11	Purchase, 1886
86.11.546	11	Purchase, 1886
86.11.548	106	Purchase, 1886
86.11.549	35	Purchase, 1886
86.11.551	11	Purchase, 1886
86.11.552	103	Purchase, 1886
86.11.553	11	Purchase, 1886
86.11.555	11	Purchase, 1886
86.11.557	14	Purchase, 1886
86.11.558	45	Purchase, 1886
56.81.52	33	Rogers Fund, 1956

Indexes

Personal Names

- Aḥu-bani*, (*šeš-ba-nu*), 65:rev. 3'
Aliksandar, (*A-lik-sa-an-dar*), 44:rev. 33
Anti'ukusu, (*An-ti'-u-uk-x-su*) LUGAL, 5:rev. 19'
Aršakā, (*Ar-šá-ka-a*), 2:rev. 14'; 12:rev. 6'

Bēl-apla-iddin, (^dEN-A-MU),
 s. of *Ea-balāssu-iqbi*, 4:L.E. 2
 f. of *Ea-balāssu-iqbi*, 2:rev. 12'
Bēl-balāssu-iqbi, (^dEN-TIN-su-E),
 f. of *Ēdu-ētir*, 65:rev. 10'
Bēl-ereš, (^dEN-KAM),
 f. of *Marduk-balāssu-iqbi*, 22:rev. 25'
Bēl-kuşuršu, (^dEN-ku-şur-şū),
 s. of *Bēl-[. . .]*, 20:rev. 11'
Bēl-lūmur, (^dEN-IGI.LĀ),
 s. of *Bēl-şuma-ukîn*, 55:386
Bēl-şuma-ukîn, (^dEN-MU-GIN),
 f. of *Bēl-lūmur*, 55:387
Bēlşunu, (*EN-şu-nu*),
 s. [. . .]-iddin, 55:385
 d. of *Na-. . .*, 55:385
Bēl-upaqqa, (^dEN-ú-pa-qâ)
 s. of *Bibbūa*, 61:rev. 50
Bēl-[. . .], (^dEN-[. . .]),
 f. of *Bēl-kuşuršu*, 20:rev. 11'
Bibbūa, (*Bi-ib-bu-ú-a*)
 f. of *Bēl-upaqqa*, 59:rev. 50

Dimitri, (*Di-mit-ri*), 3:rev. 9'

Ea-balāssu-iqbi, (^dIDIM-TIN-su-E), ^{lú}*kalē(GALA?)*
 ili(DINGIR^{meš}), 12:rev. 1'
 s. of *Bēl-apla-iddin*, 2:rev. 12'
 f. of *Bēl-apla-iddin*, 4:L.E. 2

- f. of *Marduk-zēra-ibni*, 12:rev. 2'
 d. of *Nanna-ù-tu*, 2:rev. 12'
Ea-ibni, (^dIDIM-ib-ni), ^{lú}[SAM]AN.LĀ MAŠ.MAŠ.TUR
 a. of *Şangû/Tupšar Ea* 32:rev. col. vi 30
Ēdu-ētir, (*AŞ?-KAR^{ir}*)
 s. of *Bēl-balāssu-iqbi*, 65:rev. 10'
Egibi (^dE₆-gi₇-ba-ti-la),
 a. of *Nabû-balāssu-iqbi*, 69:rev. 3'

Iddin-Papsukkal, (^lMU-^dPap-sukkal),
 f. of *Nabû-balāssu-iqbi*, 5:rev. 18'
Ina-şilli-Marduk, (*Ina-GI.Ş.GE₆?*-^dAMAR.UTU),
 s. of *Nergal-in(a)-tēši-ētir*, 66:5'
Išbi-Irra (*Iš-bi-^dEr-ra*), 41:obv. 7'

Kaşšu'a, (^lKaş?-şū?-ú-a), 67:1ff.

^dLugal-bàn-da, 65:obv. 10'

Marduk-balāssu iqbi, (^dŞU-TIN-su-E)
 s. of *Bēl-ereš*, 22:rev. 25'
 d. of *Şumu-libši*, 22:rev. 25'
Marduk-bēlşunu, (^dAMAR.UTU-EN-şū-nu), 3:rev. 7'
Marduk-zēra-ibni, (^dAMAR.UTU-NUMUN-DÙ), ^{lú}*gala-tur-ru*
 ^d*Marduk*, 2:rev. 13'
 s. of *Ea-balāssu-iqbi*, 12:rev. 1'
 f. of *Nabû-balāssu-iqbi*, 69:rev. 2'
 d. of *Nanna-ù-tu*, 12:rev. 3'
Na-. . ., (*Na-x-x*)
 a. of *Bēlşunu*, 55:386
Nabû-apla-usur, (^dNÀ-A-ÙRU), (^dNÀ-A×A[tablet: ZA]-ÙRU*),
 44:1, 19, 31*
Nabû-balāssu-iqbi, (^dNÀ-TIN-su-E), (UD.UD-TIN-su-E*),
 s. of *Iddin-Papsukkal*, 5:rev. 18'
 s. of *Marduk-zēra-ibni*, 69:rev. 3'
 d. of *Egibi**, 69:rev. 3'

Nabû-kudurrî-uşur, (^dN[À-NÍG.DU-ÙRU]), 55:389
Nanna-ù-tu, (^dNanna-ù-tu)
 a. of *Marduk-zēra-ibni*, 12:rev. 3'
 a. of *Ea-balāssu-iqbi*, 2:rev. 12'
Narām-Sin, (<*Na-ra>-am-*^d30), 32:obv. col. ii 4
Nergal-in(a)-tēši-eṭir, (^dU.GUR-in-SÙH-KAR),
 f. of *Ina-silli-Marduk*, 66:5'

Siluku, ([*Se-lu]-ku, S[e . . . *]), 63:colophon frg. A col iv 1';
 82:U.E. 1'
Sîn-šarra-iškun, (^d30-LUGAL-GAR^{un}), 44:31
Šal-la(?)-[. . .], 63:colophon frg. E col. iv 5'
Šamšu-bēl-šimat-kišati, (^dUTU^{šú}-EN-ŠI-mat-ŠÚ), 67:1ff.
Šangû/Tupšar Ea, (^{lú}SANGA / UMBISAG,^dIDIM),
 a. of *Ea-ibni*, 32:rev. col. vi 30
Šumu-libši, (^lMU-lib-ši),
 a. of *Marduk-balāssu-iqbi*, 22:rev. 25'
Ur-^dLamma, 32:obv. col. ii 13
Ut-napištim, (*Ut-zi^{tim}*), 42:rev. col. v 17

Zisudra, (*Zi-sù-ud-ra*), 42:rev. col. v 17

[. . .]-iddin (x x)-MU-na)
 f. *Bēlšunu*, 55:385*

Divine Names

Aya, (^dA-a), 5:rev. 6'
Ababasaga, (^dA-ba₄-ba₄-sa₆-ga), 11:obv. 8'
Adad, (^dIM/Iškur), 11:rev. 12'; 16:obv. 6', obv. 11'; 29:rev. col. iv 64; 32:obv. col. i 18
An, (*An*) 5:obv. 8; 11:rev. 2', rev. 7', rev. 13'; 15:obv. 5; 16:obv. 6', obv. 9', obv. 11', obv. 14', obv. 16'; 18:obv. 11'
Antu, (*An-tum*), 42:rev. col. v 22
Anu (^dA-num, *An**), 4:obv. 4; 5:obv. 7; 11:rev. 2', rev. 7', rev. 13'; 15:obv. 5; 18:obv. 11'; 25:rev. col. v 153*, rev. col. vi 175*; 29:rev. col. iii 41*; 42:rev. col. v 22; 44:rev. col. iii 6*; 96:obv. 6', obv. 7'
Anunitum, (^dA-nu-ni-tum), 62:6'
Anunna, (^dA-nun-na, ^dA-nun-na-ki*), 15:rev. 4'; 16:obv. 4'*; 29:rev. iv 66; 95:rev. 4'
Aruru, (^dA-ru-ru), 1:obv. 2; 4:rev. 32'

Asaralimnunna, (see Marduk)
Asalluhi, (see Marduk)
Aššur, (^dAš-šur), 44:obv. 6
Atu (A-tu), 1:obv. 17

Baba, (^dBa-ba₆), 14:obv. 16
Bēl, (^dEN), 2:Up.E.; 3:Up.E.; 83:Up.E.
Bēlet-ilī, (^dNin-mah, ^dNin-hur-sag*, ^dBe-let-DINGIR^{meš**}, ^dBe-let-DINGIR.MAH^{***}), 26:obv. col. iii 42*, obv. col. iii 42**, obv. col. iii 43, obv. col. iii 43**, obv. col. iii 44, obv. col. iii 44**, obv. col. iv 79*, obv. col. iv 79**; 68:rev. col. iv 10***
Bēltiya, (^dGAŠAN-iá), 2:Up.E.; 3:Up.E.; 23:10'; 83:Up.E.

Damgalnunna, (^dDam-gal-nun-na), 8:rev. 9'; 25:rev. col. v 148
Damkina, (^dDam-ki-an-na), 25:rev. col. v 148
Damu, (^dDa-mu, ^dDa-mu*), 11:rev. 11', rev. 11'*
Dikudmaḥa, (^dDi-kud-maḥ-a, ^dDi-kud-maḥ-àm*), 4:obv. 16, rev. 14', rev. 28'; 14:obv. 15*
Dumuzi'abzu, (Dumu-zi-abzu), 4:rev. 5'

Ea, (^dIDIM, ^dÉ-a*), 13:obv. 9; 22:obv. 6'; 25:rev. col. v 147, rev. col. v 150, rev. col. v 152, rev. col. vi 179*; 26:obv. col. i 13, rev. col. v 147, rev. col. v 150, rev. col. v 152; 54:rev. col. iii 3, rev. col. iii 8
Enbilulu, (^dEn/^dUmun-bi-lu-lu, ^dEn-bi-lu-lu*), 11:rev. 13', rev. 13'*; 13:9
Enki, (^dEn-ki, ^dAm-an-ki*), 2:obv. 16*, obv. 17*; 13:obv. 9; 25:rev. col. v 147, rev. col. v 150, rev. col. v 152, rev. col. vi 179; 26:obv. col. i 13, obv. col. ii 34; 31:rev. 14' and 11'; 29:45*
Enlil, (^dMu-ul-líl, ^dEn-líl*, ^dEn-líl**), 1:rev. 16; 3:obv. 14, obv. 15, rev. 3', rev. 4'; 4:obv. 6, obv. 21, rev. 25', rev. 30', rev. 32'; 5:obv. 7, obv. 9, rev. 15'; 6:rev. 11'; 7:rev. 8; 10:rev. 13, rev. 14; 13:obv. 5; 14:rev. 1, rev. 2, rev. 3, rev. 5, rev. 6; 14:obv. 33*, rev. 18*; 15:obv. 4, obv. 6*, obv. 6**; 18:obv. 11**, obv. 11**; 19:obv. 9**; 29: rev. col. iii 45*; 40:obv. 6*, 8*, 42:rev. col. v 15**, rev. col. v 23**; 54:rev. col. iii 4*, rev. col. iii 7*; 70:obv. 3(?)
Enzag, (^dEn-zag, ^dEn-zag*), 13:obv. 13, obv. 13*
Erra, (^dÈr-ra), 42:rev. col. v 5
Errešda, (^dEr-re-eš-da, ^dEr-re-eš-da), 11:rev. 5', rev. 5'*
Ereškigal, (^dEreš-ki-gal, ^dEreš-ki-gal), 27: obv. col. ii 107, obv. col. ii 108*

Gašan-KA-UR-a-sì-ga, (Gašan-KA-UR-a-sì-ga, ^dTaš-me-tum*), 2:rev. 7'; rev. 7''; 14:obv. 19

Gašan-Isin (Gašan-ł-si-in^{k1}), 11:rev. 7'; 14:obv. 18

Gašan-MAR.KI, (see Nin-MAR.KI)

Gilgameš (^dGIŠ.BIL.SAG.MES), 62: 4'

Gula (^dGu-la), 20:rev. 3'; 30:obv. 1

Gunura, (^dGu-nu-ra), 11:rev. 10'

Hédimmekuga, (^dHé-dim-me-kug-ga), 8:rev. 15'

Igalima, (^{d,gis}Ig-alim.ma), 14:obv. 6, rev. 10

^dIllat, (^dKASKAL×KUR), 40:obv. 8', obv. 10'

Iminbi, (^dImin-bi), 62:8'

Inanna, (Gašan-an-na, ^dInnnin*), 10:obv. 5', obv. 6'; 14:obv. 27, obv. 33

Irragal, (^dIr-ra-gal), 11:obv. 4'

Ištar, (^dIš-tar, ^d15*), 27:obv. col. ii 122; 32:obv. col. i 7*; 65:rev. 6*

Kabta, (^dKab-ta), 62:1'

Kusibanda, (Kù-si₂₂-bân-da), 11:obv. 6'

Kusu, (^dKù-sù, ^dKù-sù*), 27:obv. col. ii 114, obv. col. ii 114*

Lahmu, (^dLah-mu), 20:rev. 3'

Lamma, (^dLamma, [lamas-s]u*), 11:obv. 5', obv. 5''*; 25:rev. col. v 137

Lillu, (mu-lu-lil, ^dLil-lum*), 4:obv. 29, obv. 29*; 68:rev. col. iv 10*

Lugalsi, (^dLugal-si), 62:7'

Lujušam, (^dLú-juš-ám), 14:obv. 8, rev. 12

Mārāte Ezida, (^dDUMU×MUNUS^{meš} É-zí-da), 20:obv. 7, obv. 12

Marduk, (^dAsar-alim-nun-na, ^dAsal-lú-ḥi*, ^dAMAR.UTU**), 2:rev. 3'', rev. 3'''*; 13:obv. 8*, 13:obv. 8**; 18:obv. 5''*; 20:rev. 12''*; 25:rev. col. v 149*, rev. col. v 149**, rev. col. v 151*, rev. col. v 151**, rev. col. vi 177*; 26:obv. col. i 13, obv. col. i 13**, rev. col. iii 47; 29:rev. col. iv 57*, rev. col. iv 57**; 30:obv. 4*; 31:rev. 14*; 32:obv. col. i 3**; 44:obv. 1**, obv. 4**

Martu, (AN-AN-mar-tu, ^dMar-tu*), 16:obv. 13', 14'

Maštabba, (^d{AN}maš-tab-ba), 62:9'

Mullil, (see Enlil)

Muzibbasâ/Nabû, (^dMu-zí-ib-ba-sa₄-a), 2:rev. 5'; 13:obv. 12

^dNabû, (^dNA/AG, ^dNa-bi-um*), 2:rev. 5''*; 13:obv. 12; 20:obv. 1, 8, 10 (cf. Muzibbasâ)

Nādin-mê-qatî, (^dNa-din(!)-me-šu^{II}), 68:rev. col. iv. 16

Namma, (^dNamma), 8:rev. 11'; 25:rev. col. vi 176

Namtar, (nam-tar, ^dNam-tar-ru*), 4:obv. 28, obv. 28*; 38:obv. col. i 9*; 42:obv. col. i 6, obv. col. i 9*

Nanay, (^dNa-na-a, Na-an-na*, ^dNa-na-a**), 2:rev. 8', rev. 8''*; 5:rev. 4''*; 14:obv. 20, obv. 28; 20:obv. 1**, obv. 7**

Nanna, (^dNanna, ^dNa-an-na-ru*), 18:obv. 4', obv. 4''*; 25:rev. col. iv 108 (cf. Sîn)

Nanše, (^dNanše), 8:rev. 12'

Nergal, (^dUmun-irigal, ^dNè-eri₁₁-gal**, ^dU.GUR**, ^dNè-eri₁₁-gal***), 9:rev. 9', 9:rev. 9'''*; 11:obv. 3', obv. 3''**; 25:rev. col. iv 109*, rev. col. iv 109**

Ninazu, (Umun-á-zu, ^dNin-ma-žu*), 11:rev. 3', rev. 3''*

Nin-DU-TUM, (^dNin(?)DU-TUM), 19:9'

Ningal, (^dNin-gal), 8:rev. 13'

Ningikuga, (Gašan-gi-kug-ga), 8:rev. 13' (see Ningal)

Ningirda, (Gašan-gîr-da, ^dNin-gîr-da*), 11:rev. 4', rev. 4''* ^dNin-girimma (^dNin-girimma), 25:rev. col. vi 175

Ningizzida, (Umun-mu-zi, ^dNin-gîz-zi-da*), 11:rev. 4', rev. 4''*

Ninhursag, (Ga-ša-an-ḥur-sag, ^dNin-ḥur-sag*, ^dNin-ḥur-sag**) 1:rev. 1', rev. 5', rev. 8', rev. 17'; 26:obv. col. iii 42* (cf. Bēlet-ili), obv. col. iv 79* (see Bēlet-ili)

Ninilduma, (^dNin-ıldu-ma), 62:3'

Ninimma, (^dNin-ımma), 11:obv. 6'

Ninkarnunna, (^dNin-kar-nun-na), 11:obv. 1'

Ninlil, (^dNin-lîl, ^dNin-lîl*), 4:obv. 23, rev. 31'; 6:rev. 9'; 23:11'; 42:rev. col. v 23*

Nimmada, (^dUmun-ma-da, ^dNin-ma-da*), 11:rev. 2', rev. 2''* ^dNinmah, (see Bēlet-ili)

Nin-MAR.KI, (Gašan-MAR.KI), 5:rev. 2'; 7:rev. 4, rev. 12

Ninmaš, (Umun-maš), 11:obv. 9'

Nin-mug(-)LUM-ma-SU(?), (Gašan-mug(-)LUM-ma-SU(?), ^dNin-mug(-)LUM-ma-SU*), 11:obv. 2', obv. 2''*

Ninšenkulkul, (Umun-ṣen-kul-kul, ^dNin-ṣen-kul-kul*), 11:obv. 7', obv. 7* (see Ninimma)

Ninsianna, (^dNin-si₄-an-na), 62:2'

Ninšubur, (Gašan-ṣubur, ^dNin-ṣubur*), 11:rev. 8', rev. 8''*

Nintinugga (Gašan-tin-lu-ba, ^dNin-tin-ug₅-ga*), 11:rev. 6', rev. 6''*; 14:obv. 17

Ninurta, (^dNin-urta, ^dMAŠ*), 4:UE. 35'; 14:obv. 24; 15:rev. 7'; 21:5''*; 25:rev. col. iv 110

^dNuska, (^dNuska), 20:obv. 13; 29:rev. col. iii 46, rev. col. iii 47

Pabilsag, (^dPa-bil-sag), 11:rev. 9'

^dPA.NAM, 32:obv. col. i 12

Papnunanki/Zarpānītum (see Zarpānītum)

- Papsukkal, (^dPap-sukkal), 14:obv. 7, rev. 11
- Saman, (^dSaman), 16:obv. 16'
- Sîn, (^dNanna, ^dSuen*, ^d30***) 25:rev. col. iv 108, rev. col. iv 108**; 26:obv. col. iii 44*, obv. col. iii 44**; 29:rev. iii 45*, rev. iii 45**; rev. iii 48*, rev. iii 48**, rev. col. iv 58*, rev. col. iv 58**; 32:obv. col. i 14**; 54:rev. col. iii 2**; 68:obv. col. i 13**
- Sud^Dag, (^dSù-ud-ág), 11:rev. 15'
- Sukkal-mah-àm, 14:obv. 7, rev. 11 (cf. Papsukkal)
- Sukkumu, (^dSuk-ku-mu), 20:obv. 4, obv. 5, obv. 6
- Sumiya, (^dSu-mi-ia), 20:obv. 1
- Šakkan, (^dŠakkan, ^dŠak-kán*), 29:rev. col. iv 67, rev. col. iv 67*
- Šamaš, (^dUtu), 11: rev. 1'; 18:obv. 4'; 22:obv. 5'; 25:rev. col. iv 108; 27:rev. col. iii 145; 29:rev. col. iv 64; 32:obv. col. i 16; 40:obv. 7'; 54:rev. col. iii 1, rev. col. iii 10; 65:obv. 11'
- Šēdu, (^dALÀD), 70:obv. 3
- Šiddukišarra, (^dŠid-dù-ki-šá[r-r]a), 13:obv. 13
- Šulpa'ea, (^dŠul-pa-è-a), 4:obv. 27
- Tašmētum, (Gašan-KA-UR-a-sí-ga, ^dTaš-me-tum*), 2:rev. 7', rev. 7**
- Tutu, (^dTu-tu), 30:rev. 10
- Ukkumu, (^dUk-ku-mu), 20:obv. 4, obv. 5, obv. 10
- Umun-GÌR, (Umun-GÌR), 11:obv. 9'
- ^dUraš, (^dUraš, ^dUraš*), 2:rev. 6', rev. 6**; 4:obv. 7, rev. 26'; 8:rev. 14'
- Utulu, (Ut-u₁₈-lu, ^dUt-u₁₈-lu*), 14:obv. 1, obv. 2, obv. 9, rev. 19*
- Wer, (^dWe-er-an-na), 62:5'
- Zababa, (^dZa-ba₄-ba₄), 4:obv. 11
- Zarpānītum, (^dPap-nun-an-ki, ^dZar-pa-ni-tú*, Zar-pa-ni-tum**), 2:rev. 4', rev. 4**; 8:rev. 10', rev. 10**; 20:rev. 12**; 44:obv. 4**
- ## Geographical Names
- Adab, (Adab^{ki}), 6:rev. 12'
- Akkadû, (Uri^{ki}), 44:obv. 2
- Aššur, (Aš+šur^{ki}), 44:rev. 31
- Bābilu, (KÁ.DINGIR.RA, E^{ki*}, Ba-bi-li**, KÁ.DINGIR^{meš.ki***}), 3:rev. 8**; 12:rev. 4', rev. 13**; 22:obv. 16**, rev. 26**; 44:obv. 1*, rev. 33*; 61: rev. 49***; 65 obv. 4'(?)
- Bābili/Tintir, (Tin-tir^{ki}), 2:rev. 10', 3:obv. 7; 5: rev. 7', rev. 8'; 6:obv. 3'; 10:obv. 12'; 13:obv. 10; 14:obv. 23; 16:obv. 7'; 20:rev. 13'; 101:rev. 2'
- Barsipa, (Bàd-si-ab-ba^{ki}, Bar-sip^{ki*}, Bar-si-pa**), 3:obv. 9; 5:rev. 9'; 17**; 13:obv. 14, obv. 14**; 20:rev. 13**
- Dumusagubba, (dumu-sag ub-ba), 5:rev. 3'
- Eridu, (Eridu^{ki}, Úru-zí-ib^{ki*}, Úru-zí-ib-ba^{ki**} Eri₍₄₎-du₁₀***), 2:obv. 1***, obv. 3*, obv. 3***; 8:rev. 4'*, rev. 4***, rev. 7**, rev. 7***, rev. 8**, rev. 8***, rev. 12**, rev. 12***; 25:rev. col. v 136, rev. col. v 136***, rev. col. vi 177, rev. col. vi 177***; 26:rev. col. iii 40, rev. col. iii 40***, rev. col. iii 47***
- Girsu, (Me-er-si, Me-er-si), 11:rev. 11', rev. 11'*
- Hursagkalamma, (Hur-sag-kalam-ma^{ki}), 7:obv. 8'; 10:obv. 12'; 14:obv. 21
- Keš, (Kès^{ki}), 6:rev. 10'; 26:obv. col. iii 44
- Kibalmašda, (Ki-bal-maš-dá^{ki}), 6:obv. 4'
- Kiš, (Kiš^{ki}), 6:obv. 6'; 14:obv. 4, rev. 8
- Larak, (La₇-rà-ag, La-rak^{ki}), 11:rev. 9', rev. 9**
- Nippuru, (Nibrū^{ki} / EN.LÍL^{ki}, Ni-ip-pu-ru*), 3:obv. 3, obv. 3*; 13:obv. 2, obv. 6; 13:obv. 2*, obv. 6; 65:obv. 4'
- Parašū, (^{kur}Pa-ra-ši-i), 44:obv. 5
- Sippar, (Zimbir^{ki}), 3:5; 5:rev. 5'; 16:obv. 8'; 58:rev. 3'; 70:obv. 2
- Sippar ša šéri, (Zimbir-edin-na^{ki}), 58:rev. 4'
- Sippar ša šáti (Zimbir-ul-li-a^{ki}), 58:rev. 5'
- Sippar ša Šamši, (Zimbir-^dUtu^{ki}), 58:rev. 6'
- Subartu, (SU.BIR₄^{ki}), 41:obv. 1'
- ^{kur}ŠI-AŠ, 44:obv. 5
- Uri, (šeš.unu^{ki}), 55:obv. col. i 19
- Uruk, (Unug^{ki}), 7:obv. 4

Zabalam, (Zabalam^{ki}), 7:obv. 7'; 10:obv. 9'

Temple and Chapel Names

bīt(É)-dÉ-a, 2:16,17

bīt(É) dNabû(NÀ) šá nikassi(NÍG.KA9), 65:rev. 8'

bīt(É) g̃išnarkabti(GIGIR?), 68:obv. i 19'

bīt(É) dNergal(U.GUR), 68:obv. i 14', 15'

bīt(É) dNuska, 68:rev. iv 11'

bīt(É) dŠîn(30), 68:obv. i 13'

é(?)[. . .], 15:rev. 1'

é-an-na, 5:rev. 16'; 7:obv. 5', rev. 1; 10:obv. 9'

é-babbar-ra, 3:obv. 6

é-dāra-an-na, 3:obv. 11; 7:obv. 3'

é-di-kud-ta, 16:obv. 1'

é-d̃i-kud-kalam-ma, 3:obv. 6; 16:obv. 2'

é-dim-an-ki, 5:rev. 10'

é-dub-ba, 4:obv. 12; 6:obv. 7'; 14:obv. 4, rev. 8

é-engur-ra, engur-ra* 2:obv. 4,5*; 8:rev. 11'

(é)-gi₆-pàr, 16:obv. 8'

(é)-gi₆-pàr-imin-na, 7:obv. 6'

é-gu-la, 26:obv. iii 45

é-hur-sag-kalam-ma, 3 R.E.

é-i-b̃i-d̃A-nu-um, 4:obv. 15

é-ki-si-ga, 6:rev. 13'

(é)-ki-ùr, 3:obv. 4

é-kur, 3:obv. 4; 4:obv. 22; 13:obv. 3; 15:obv. 7

É-kur, 4:obv. 22; 13:obv. 3

é-mah̃, 8:rev. 14'

é-mah̃-ti-la, 3:obv. 10; 7:obv. 1'

é-me-te-ur-sag, 4:obv. 13; 14:obv. 5

é-miš-lam, 4:obv. 14

é-nam-hé, 16:obv. 7', obv. 11'

é-nam-ti-la, 3:obv. 4, R.E.

é-nin-gar-ra, 26:obv. iii 37

é-ninnu, 4:obv. 8

é-rab-ri-ri, 4:obv. 17, rev. 29'

é-sag-íl, 3:obv. 8; 8:rev. 24'; 13:obv. 11

É-sag-íl, É-sag-gil* 19: col. B 4'*; 21:10'; 22:obv. 16'*; 44:32*, 65:rev. 9'

é-sù-ga, 4:obv. 24

É-sù-ga, 4:obv. 24

é-šà-ba, 11:rev. 15'

é-šár-ra, 4:obv. 9

É-šár-ra, 44:obv. 6

é-šu-me-ša₄, 4:obv. 10, rev. 27', 34'; 15:rev. 2'

é-te-me-an-ki, é-te-me-en-an-ki* 3:obv. 11; 7:obv. 2'*

é-TE-ME-ur-sag, 14:rev. 9

é-tùr-kalam-ma, 3:obv. 8; 6:obv. 2'; 7:obv. 9'; 10:obv. 13'; 14:22

é-u₆-nir-ki-tuš-mah̃, 14:obv. 5, rev. 9

é-zi-da, 2:obv. 15; 3:obv. 10; 13:obv. 11

é-zig-gur-rat, 89:obv. 7

é(?)-[. . .], 4:rev. 7', 12'

gú-ab-ba, 5:rev. 1', 2'

ki-i-ši, 26: obv. iii 44

ki-nú-ur₅-šà-ba(?), 4:rev. 2', 4'

ki-ùr, 6:rev. 8'

Gates

abul(abul) dIštar(15), 44:obv. 9

bāb(ká) é-zig-gur-rat, 89:obv. 7

bāb(ká) pa-ṭar [. . .], 89:obv. 8

bāb(ká) é-D[U(?)] . . ., 89:obv. 9

ka-hegal (ká.hé.gal), 68:obv. col. i 19'

PART ONE

NOS. 1-24

DOCUMENTS OF THE TEMPLE CULT

Nos. 1–19

Hymns and Prayers

No. 1

Old Babylonian Balag, to the Mother Goddess Aruru

Konrad Volk

Introduction

MMA 86.11.62 can be dated by the script to the Old Babylonian period. The text most probably belongs to the genre of the balag composition, liturgical compositions accompanied by a musical instrument called balag, which denotes either a drum or a harp (see A. D. Kilmer, “Musik,” *RLA* 8 [1995], p. 463 s.v. “Musical Instruments”). The genre of this text would have been indicated at the end of the tablet, but unfortunately, the end is broken away. Nevertheless, the text can be identified as a balag because it contains the typical features of the Old Babylonian balag.

The text is divided by horizontal rulings into sections, some of which are explicitly labeled kirugu or, rarely, gišgigal. Characteristic features include a mournful tone, repetitions of words and phrases, and especially the use of the Emesal dialect. This purely literary dialect is the typical language of the Sumerian gala = Akkadian *kalû* liturgist, a temple functionary who usually sang or recited (and perhaps also composed) liturgical literature for a ritual context, such as festivals, particular days of the month, and ceremonies for the leveling and restoration of temples (see below p. 11). The ritual of temple restoration is closely connected with the contents of these compositions. They generally describe the destruction of sacred buildings (along with the removal and expulsion of the gods) and of cities and their inhabitants, resulting in the disruption of cultural and economic life. But in evident contrast to historical lamentations, balag compositions make no mention of any specific historical event. They are limited to a very general terminology.

Balag compositions are attested in the Old Babylonian period and were copied in canonical form from the Middle Babylonian period until the Seleucid period (see text Nos. 2–17). The Old Babylonian balag compositions have forerunners that date to at least the Isin-Larsa period. Unfortunately, it is still quite unclear how far back we can trace the origins of this genre.

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1.

MMA 86.11.62

Plates 1, 2

H. 100 mm W. 49 mm Th. 27 mm

Old Babylonian balag, to the mother goddess Aruru

Old Babylonian period

Publication: J. Maynard, "A Lamentation to Aruru (Metropolitan Museum No. 112)," *JSOR* 3 (1919), pp. 14–20

Obverse

1. ul ₄ -ul ₄ -la mu-un-DU { . . . }	
2. ^d A-ru-ru ul ₄ -ul ₄ -la mu-u[n-DU . . .]	x [. . .]
3. nin-sa ₆ -ga	'SAL + x ¹ x [. . .]
4. áb ér-ra	mar-uru ₅ z[i-ga]
5. mu-lu zi-ga-ni	eme-sig n[ú-a]
6. mu-lu nú-a-ni	muš-šà-t[ùr . . .]
7. gu ₄ -dam ki-bal-a	má-da-'lá ¹ [. . .]
8. i ₇ -gal-gal-e	sig ₁₄ -g[i ₄ . . .]
9. i ₇ -bur-dagal-e	i ₇ -bi { . . . }
10. i ₇ -da na-ág ba-e-tar	še-b[i . . .]
11. a-šà-ga na-ág ba-e-tar	'i ₇ ' [. . .]
12. i ₇ -nam-ku ₅ -da-zu	[a-šà . . .]
13. a-šà-nam-ku ₅ -da-zu	[dam . . .]
14. dam-na-ág-ku ₅ -da-zu	[dumu . . .]
15. dumu-na-ág-ku ₅ -da-zu	[dumu . . .]
16. é-kar-ra-zu	[. . .]
17. A-tu-'zu ¹	[. . .]
18. á-dàra-zu	[. . .]
19. é-zu é-zu-gim	[. . .]
20. úru-zu úru-zu-gim	[. . .]
21. dam-zu dam-zu-'gim ¹	[. . .]
22. dumu-z[u dumu]-'zu ¹ -[gim . . .]	[. . .]
23. x [. . .]	[. . .]
(rest of obverse broken)	

Reverse

1'. égi ga-ša-an-ḥur ¹ -[sag-gá . . .]
2'. sipa-tur ki-amaš-'a ¹ [. . .]
3'. eden-na DU NE.DU [. . .]
4'. ta a-ab-ba	[ba-da-ab-ús]
5'. égi ga-ša-an-ḥur-sag-gá	é[gi . . .
6'. i-bí il-lá-zu	a-ba-[a ba-ra-è]
7'. du ₁₀ -bad-rá-zu	a-ba-a [ba-ra-šub-bu]
8'. égi ga-ša-an-ḥur-sag-gá	égi x [. . .]
9'. é-tùr mu-e-gul	áb sá[g ba-e-du ₁₁]
10'. ki-amaš mu-e-ḥul e-zé	am[aš-a ság ba-e-du ₁₁]
11'. dumu ama-gan-zi-da ur-re-eš	[ba-tu-bé-eš]
12'. mu-lu-mah mu-bur-ra nu-mu-e-DU x [. . .]
13'. tu-mu-mer zà-ga nu-mu-'e ¹ -[. . .]
14'. é-gal-kèš ^{ki} -ke ₄	na-ma-ni-[. . .]
<hr/>	
15'. u ₅ ér-mah	u ₅ [ér-mah]
16'. nin-gal- ^d Mu-ul-líl-lá	u ₅ [ér-mah]
17'. égi ga-ša-an-ḥur-sag-ke ₄	u ₅ [ér-mah]
18'. UL ₄ .UL ₄ -tur-ra	UL ₄ .UL ₄ -[mah-a]
19'. UL ₄ .UL ₄ útéme ^{sar} -gim	šú-šú-[a]
20'. gišmar-mah-tur-re	gišmar-m[ah] . . .
21'. gišeren-kud-rá-e	gišeren-ku[d-rá-e]
22'. sahar(?) -sù-ga	u ₅ é[r-mah(?)]
<hr/>	
23'. a-RI.RI túm-ma	ki-'amaš'-a [. . . sá[g ba-ab-du ₁₁] (?)

Translation

Obverse

1. The one who hastens came along [. . .
2. Aruru, the one who hastens [came along . . .
3. The beautiful lady [. . .
4. The cow in wailing [. . .
5. (When) she rises up, a storm r[ises].
6. (When) she rests, slander r[ests].
7. (Like) a wild bull in the rebel lands, a poisonous s[nake] . . .
8. To the great rivers [. . . .] the punting pole.
9. To the river, a broad vessel, [. . . .] shout[ing] . . .
10. For the river you decreed a destiny, that river [. . .

11. For the field you decreed a destiny, that grain [. . .]
12. You cursed a river, [(that)] river [. . .]
13. You cursed a field, [(that) field . . .]
14. You cursed a spouse, [(that) spouse . . .]
15. You cursed a child, [(that) child . . .]
16. Your “Quay-House” [. . .]
17. Your Atu [. . .]
18. Your ibex horn [. . .]
19. Your house like your house—[(Alas!)]
20. Your city like your city—[(Alas!)]
21. Your spouse like your spouse—[(Alas!)]
22. [You]r child [like] your [child—(Alas!)]
23. . . . [. . .]

Reverse

- 1'. Princess Ninhur[sag] . . .
- 2'. [You have killed](?) the young shepherd in the sheepfold.
- 3'. Walking in the steppe [. . .]
- 4'. What can [stride with you] in the sea?
- 5'. Princess Ninhursag, p[rincess . . .]
- 6'. When you lift your eyes—who [can escape(?)]
- 7'. When you stride—who [can get off(?)]
- 8'. Princess Ninhursag, princess [. . .]
- 9'. You devastated the cattle pen; the cows [were scattered by you].
- 10'. You destroyed the sheepfold; the sheep were [scattered in the sheepfold].
- 11'. (Even) children (and) child-bearing mothers [were heaped up together].
- 12'. You did not let the high priest carry the magic wand. [. . .]
- 13'. You did not [hold back] the north wind [. . .]
- 14'. At the palace of Keš you did not [.] for me(?)

- 15'. Woe! Profound weeping! Woe! [Profound weeping!]
- 16'. Elder sister of Enlil! Woe! [Profound weeping!]
- 17'. Princess Ninhursag! Woe! [Profound weeping!]
- 18'. The little *kiši*-plants, the [finest] *kiši*-plants,
- 19'. the *kiši*-plants altogether are overturned like a *qaqqullu*-plant.
- 20'. By the small shrubs, the [.] shrubs,
- 21'. by the cut cedars, the c[ut] cedars,
- 22'. the soil is ravaged. Woe! P[rofound weeping!]

- 23'. Spilling the seed that has been [.] she scatters [.] in the sheepfold.

Notes

This author wishes to thank J. J. A. van Dijk, W. G. Lambert, and especially S. Votto for various suggestions and for corrections to his English style.

Obverse

- 1: *ul₄-ul₄-la* must be a divine epithet in this position, although this epithet seems hitherto unattested. The context suggests that the term means “the one who hastens,” but the meaning “the hastened one” is also grammatically possible. Cf. *ul₄-ul₄-la* in Inanna and Bilulu l. 94 (see Th. Jacobsen and S. N. Kramer, “The Myth of Inanna and Bilulu,” *JNES* 12 [1953], p. 174) and *ul₄-ul₄-le im-DU* “(The messenger) runs quickly” in Enmerkar and Ensuhkešdanna l. 49 (see A. Berlin, *Enmerkar and Ensuhkešdanna*, Occasional Publications of the Babylonian Fund 2 [Philadelphia, 1979], p. 42). *ul₄-ul₄-la* as an epithet should also be compared to the one of the many abilities of Inanna in the programmatic Innin-Šagura. In l. 116 (conflated text; see Å. Sjöberg, “A Hymn to the Goddess Inanna,” *ZA* 65 [1975], p. 231) it says: [x] x *ul₄-ul₄* (var.: *ul-lu-ul*) *zi-zi x an-ta sá-sá-dè* ^dInanna za-a-kam/*i-ta-ap-ru-ur-rum ha-ma-tú-um ma-qa-tum te-bu-ú ù ta-ap-pa-am* < . . . > ^r*ku¹-ma Iš₈-tár*, “to run around, to hasten, to fall down, to raise and to . . . a companion are yours, Inanna.” For a discussion of the semantic range of *ul₄* see Black, “A-še-er Gi₆-ta,” p. 48, and MSL 14, pp. 503–4, 248–59.
- 2: The mother goddess Aruru of Keš is identified with Ninhursag (Emesal: Gašanḥursag) several times on the reverse of the composition.
- 3: Ll. 5–7 form a three-line unit, which also occurs (lines in reverse order) in the syllabic Šulpa²e-Aruru text OECT 5, 10:rev. col. v 5–7: ^dA-ru-ru mu-lu 'nu-a¹-ni me-si 'nu¹-a/^dA-ru-ru mu-lu zi-ga-ni mar-ur[u₅] 'zi¹-ga/gù-da ki-b[al]-'^ra(?)' ušumgal 'šu¹ x x nu-a. Note the syllabic nu for nú, me-si for eme-sig of our text and also gù-da for gu₄-da(m). Does gu₄-dam here allude to the myth of gu₄-dam (see W. Heimpel, “Gudam,” *RLA* 3 [1971], pp. 675–76)? Since ušumgal of OECT 5, 10:rev. col. v 7 (cf. G. B. Gragg, “The Keš Temple-Hymn,” in Å. Sjöberg and E. Bergmann, *The Collection of the Sumerian Temple Hymns*, TCS 3 [Locust Valley, N.Y., 1969], p. 187) is here replaced by muš-šà-tùr : bašmu, “poisonous serpent,” the end of the line is not restored. Note that it is not only Aruru-Ninhursag, the goddess of Keš, who has this epithet muš-šà-tùr but also her temple in Keš.
- 8: Although this line cannot be restored completely, má-da-lá may be interpreted as *tillatu*, “punting pole.” But compare ^{gi/giš}má-da-lá “Ziehleine,” for which see Th. Balke, “Eine neusumerische Urkunde über Materialien für den Schiffsbau,” UF 25 (Neukirchen-Vluyn, 1993), p. 5.
- 10–11: na-ág—tar of these lines must be separated from nam—tar of ll. 12–15, because of the different construction (with locative /-a/ as opposed to absolute /-Ø/). For nam-/na-ág—tar, “to decree fate,” with the locative see D. O. Edzard, “Zum sumerischen Eid,” AS 20, p. 70. Interestingly, the Aruru-text CT 36, 48:rev. col. ii 15 states i₇ a-bi mu-ra-an-ba a-šà še-bi mu-ra-an-ba, “He (An) gave to you as a gift the water of the river; he (An) gave to you as a gift the barley of the field.” So apparently Aruru decrees fate for the river and the field that she was once given by the great An.
- 12: A parallel to this line is found in BM 38593 (see K. Volk, “Die Balag-Komposition úru àm-ma-ir-rabi,” FAOS 18 [1989] pl. Ib); this text will be published by the present writer; col. ii 25: i₇-da a-bi umun-[^d][Am-a]n-ki-ke₄ na-ág im-ma-ku₅-dè/na-a-ri ša-a-ši be-lum [^d]É¹-a li-ru-ur-ši, “May Lord Enki curse that river” (Sum.: “the water of the river”).

- 16: The mention of the temple é-kar-ra in this context is noteworthy. Ekarra points to Dilmun, where this temple ("House of the Quay," see George, *House Most High*, pp. 107–8) is the temple of Ninsikila, who, in a certain tradition, is the wife of Lisin, the son of Ninhursag (see A. Falkenstein, "Sumerische religiöse Texte. 4. Ein Lied auf Šulpa²e," ZA 55 [1963], p. 30). The possibility of a (syncretistic) conflation between Ninhursag's son Lisin and the mother goddess Lisin cannot be discussed here. For the present note S. N. Kramer, "Lisin, the Weeping Mother Goddess: A New Sumerian Lament," in G. van Driel et al., eds., *Zikir Šumim: Assyriological Studies Presented to F. R. Kraus on the Occasion of his Seventieth Birthday*, Nederlands Instituut voor het Nabije Oosten Studia Francisci Scholten Memoriae Dicata 5 (Leiden, 1982), p. 137 n. 12. In Langdon, *BL* 175:rev. 9–10, the Ekarra is connected with Ninbanda.
- 17: Atu most likely refers to a-tu-bànda (cf. An = *Anum* II 100 ^dA-tu-bàñ-da = ama-siki-lá-ke₄ [the reading of this entry is courtesy of W. G. Lambert]), who is closely connected with Ninhursag, Ašgi, and Lisin in the Lamentation to Lil, the son of Ninhursag: A-tu-bànda na-ág-er-ra bí-ri-ib-lá, "Atubanda, wailing, turns toward you" (see F. Thureau-Dangin, "La passion du dieu Lillu," *RA* 19 [1922], p. 184:obv. 11, 25). Since Atu is presumably an abbreviated form, it could also be understood as ^dA-tu-gu-la mentioned in *KAV* 64:obv. col. ii 21–22: ^dA-tu-gu-la ní-te dingir-mah-ke₄/^dA-tu-gu-la pa-lih ^dBēlet-ilī, "Atugula who reverses Dingirmah/^dBēlet-ilī." The whole matter needs further research. At any rate it is striking that a-tu in our text and a-tu-bànda (see above F. Thureau-Dangin, "La passion du dieu Lillu," *RA* 19 [1922], p. 184) are written without the divine determinative, as opposed to ^dA-tu (gašan-gal-e) in *TCL* 6, 54:obv. 21 (and duplicates). Finally a-tu could also denote the Atu-priest, for which see *MSL* 12, p. 41 226–27, and especially the Keš temple-hymn 109 (a-tu-e šibir šu bí-in-du₈, "The Atu-priest held the staff"; see Sjöberg, *Temple Hymns*, TCS 3, 174 and 186). For a discussion of a-tu see also W. L. Moran, "The Keš Temple Hymn and the Canonical Temple List," in *Kramer Anniversary Volume: Cuneiform Studies in Honor of Samuel Noah Kramer*, AOAT 25 (Neukirchen-Vluyn, 1976), pp. 340–42.
- 18: The meaning of á-dàrà in this passage is not entirely clear. It literally means "horn of the ibex" and is to be compared with CT 42, 19:14, paralleled by VS 10, 198:15 (eršemma of Dingirmah): á(!)-dàrà TUR sug-ge gu₇-a-gu₁₀. Significant for the problem of how to interpret á-dàrà is the late and quite distorted translation of á-dàrà gašan-hur-sag-gá with *i-dan šá-qa-a-tú be-let-DINGIR^{meš}*, "She of the ibex horns, Ninhursag: She of valorous strength, Bēlet-ilī" (see Cohen, *CLAM* 2, pp. 50; 518). One could also argue that in our text á represents a syllabic spelling of é and that the term then represents the late é-dàrà-(an-na) of Enki. Note however Langdon, *BL* 56:obv. 20: gašan-é-dàrà-an-na.
- 19–22: This section is perhaps to be restored according to CT 44, 17:obv. 10–13: é-zu é-zu-šè ù-<li-li>/ úru-zu úru-zu-šè ù-/dam-zu dam-zu-šè ù-/dumu-zu dumu-zu-šè ù-, "Your house! To your house! Alas! etc."

Reverse

- 3': There is no convincing evidence for the reading of DU NE.DU. gen-ne-mèn. "You were the one who walked in the steppe" seems possible but not compelling. Although this line is incomplete, it surely alludes to parallels like *SBH* 12:obv. 20–21: eden-na DU-ba eden šà-su-ga-{ gu₁₀} / še-ra-am ina a-la-ki-šú hu(!)-ur(!)-bu-um-ma, "When he walks around (Sum.: stands) in the steppe, the steppe becomes wasteland."
- 4': *SBH* 23:obv. 26 and Langdon, *BL* 96:obv. 2: ta a-ab-ba ba-da-ab-ús permit us to restore this line. This phrase, as in the text just cited, usually forms a couplet with ta idim-ma ta nu-mu-da-sá, "What in the

- depths, what (is it), that you do not reach?" Interestingly, the couplet of ll. 6'-7' of our text also follows immediately in *SBH* 23:obv. 23–29 and Langdon, *BL* 96:obv. 3–4.
- 6'-7': Both lines form a well-known doublet occurring in many balag compositions, for which see K. Volk, "Die Balag-Komposition úru àm-ma-ir-ra-bi," *FAOS* 18 (1989), p. 168.
- 9'-11': These lines represent a three-line unit also found in other balag compositions. Cf. especially CT 36, 35:obv. col i 22–24 (+ dupl.); cf. S. N. Kramer, "By the Rivers of Babylon: A Balag Liturgy of Inanna," *AuOr* 5 (1987), p. 72: é-tùr mu-e-gul áb ság ba-e-du₁₁/ki-amaš mu-e-ḥul e-zé ság ba-e-du₁₁/šá-zu dumu ama-gan-zi-dè ur-re-eš ba-tu₁₀-bé-eš.
- 12': mu-bur-ra is to be understood as Emesal writing for giš-búr-ra = *iš pišri*, "magic wand" (see *CAD* I-J, p. 218 s.v. *išu*).
- 13': For tu-mu as a syllabic spelling of tu₁₅ (-m) = šāru, "wind" see G. Cros, *Nouvelles fouilles de Tello* (Paris, 1910), p. 207; obv. col. iii 6, where we read tu-mu-me-er, "northwind." zà-ga is possibly the nominal part of a compound verb. Compare for example zà-(ga)—dab/tag/gub/lá/ús. Based on the context one could guess a meaning like "you did not detain(?) the northwind," perhaps construed with the semantically related zà-(ga)-dab/tag (see W. H. Ph. Römer, "Das sumerische Kurzepos 'Bilgames und Akka,'" *AOAT* 209/1 [Neukirchen-Vluyn, 1980], p. 67; Å. Sjöberg, "Beiträge zum sumerischen Wörterbuch," *OrNS* 39 [1970], pp. 88–89). Yet it should be noted that the faint traces of a vertical wedge after /-ga/ could indicate a reading zà-ta.
- 16': As often, the intended nin₉, "sister," is written nin. For Aruru as a sister of Enlil see, for example, Å. Sjöberg, *The Collection of Sumerian Temple Hymns*, TCS 3, p. 74.
- 18': These lines can be interpreted only by comparison with de Genouillac, *Kich* 2, B 471:rev. 16'-18'//OECT 5, 10:col. iv 15–17, because the unit quoted there corresponds roughly to ll. 18'-19' (split) of our text. Since de Genouillac, *Kich* 2, B 471, has UL₄-UL₄-tur-ra-zu šu mu-ra-[ab]-du₇/UL₄-UL₄-maḥ-a-zu šu mu-ra-[ab-du₇], "Your small . . . has been made perfect for you, your outstanding . . . has been made [perfect] for you," UL₄-UL₄ must denote some *realia*. If the following context is correctly interpreted, UL₄-UL₄ might then denote some tree or shrub, probably to be read kiši₁₇-kiši₁₇ = *ašāgu*, "prosopis farcta," a thorny, straggling shrub (Arab.: šōk/*harnūb*) bearing *harub*-fruits (see M. Civil, "The Lexicon as a Source of the Literary Inspiration," in F. Rochberg-Halton, ed., *Language, Literature, and History: Philological and Historical Studies Presented to Erica Reiner*, AOS 67 [New Haven, 1987], pp. 47–48, and C. C. Townsend, "Leguminales," in C. C. Townsend and E. Guest, eds., *Flora of Iraq* 3 [Baghdad, 1974], pp. 38–42 and pl. 7). Less likely is the interpretation of ul₄ as "myrtle" (see K. Volk, "Zur Lesung von teme (NAGA-inversum) und teme (NAGA)," *NABU* [1990], p. 37 n. 54). Whether this expression is to be paralleled with ul-gal-gal, of the Aruru text published by L. Speleers, *Recueil des Inscriptions de l'Asie Antérieure des Musées Royaux du Cinquantenaire à Bruxelles* (Brussels, 1925, 189:obv. 13–14) remains uncertain.
- 19': The reading of útéme^{sar} is evident from the syllabic parallel OECT 5, 10:rev. col. iv 17' UL₄-UL₄ de-me-gim šú-šú-a. For téme = *qaqqullu* see K. Volk, *NABU* (1990), p. 37 n. 54. Cf. for our context HS 1885:14 (*atabbak*) kī qāqulli, "(I throw down [the enemy]) like a *qaqqullu/qāqullu*-plant" (unpublished MB text, quoted by *CAD* Q, p. 124 s.v. *qaqqullu* 1).
- 20': gišmar-maḥ-tur-re creates a number of difficulties. At first glance one could be tempted to interpret gišmar-maḥ as "great shovel," in view of the fact that Ninkasi, who is the ^dNin-ḥur-sag-gá-ke₄ mí-zi-dè-eš du₁₁-ga,

“tenderly cared for by Ninhursag,” handles the *gišmar-mah* to mix the dough for the bappir-bread (see M. Civil, “A Hymn to the Beer Goddess and a Drinking Song,” in *Studies Presented to A. Leo Oppenheim, June 7, 1964* [Chicago, 1964], p. 69 ll. 4, 14). But this makes no sense in our context. *gišmar-mah* may also be interpreted as *(m)armahhu*, “shrub.” Admittedly this seems to be lexically a hapax legomenon, but it fits our context well. So *armahhu* (see CAD A/2, p. 290 s.v. *armahhu*), until now attested only in lexical texts and a single Neo-Assyrian royal inscription, may be derived from *gišmar-mah* (see K. Volk, “*(m)armahhum*-mar-mah ‘ein Obstbaum,’ ” *NABU* [1992], pp. 14–15).

- 21': The first sign of the line is not entirely clear but is most likely *sahar*; compare lexically and semantically *kuš₇* (SAHAR)—*su-su/sù-sù*, “to level the land” and *šà-sù-ga*, “waste, empty land.”
- 22': The translation offered here remains highly tentative. Since this line is the beginning of a new literary unit, one cannot be sure whether the preceding subject (destruction) is continued or not. Possibly the contents of the line are to be connected with Cohen, *CLAM* 2, p. 732 (= BM 96568) ll. 9–10: *u₄-te-eš tūr-ra a ri . . . / u₄-te-eš amaš a ri . . .*, “a violent storm that spills the seed in the sheepfold. . . .” Also note OECT 5, 10:col. iii 11–12: *u₄ a ri-a A ri-hu-tum-ma / i-a-gim u₄ A ri-a a ri-hu-tum-ma*.

Nos. 2–18

Bilingual (Sumerian-Akkadian) Hymns from the Seleucid-Arsacid Period

Stefan M. Maul

Introduction

Aside from text No. 33, the tablets published in this volume were purchased by the Reverend William Hayes Ward on the London antiquities market in 1885 and were acquired by The Metropolitan Museum of Art in 1886.¹ It is clear from those texts with preserved colophons that the bilingual (Sumerian-Akkadian) tablets from the Seleucid-Arsacid period were written in the city of Babylon. They are part of a family library, a family tracing its origin back to ^dNanna-ù-tu² and from whose house several lamentation singers (Sum.: *gala*, Akk.: *kalû*) arose during the Seleucid-Arsacid period. This library of the lamentation singers was built up over several decades³ and consisted mainly of tablets with traditional songs and prayers in the Sumerian language that follow already ancient traditions. They were to be recited in the cult of the gods and were probably also used in various rituals in the second and first centuries B.C.

The *kalû* would sing or recite songs and prayers of certain types,⁴ written in a Sumerian dialect called the Emesal dialect.⁵ The largest group of songs written in the Emesal dialect were called *balags*,⁶ named after the stringed instrument that was used to accompany the songs.⁷ The theme of the *balags* is often a lament over the destruction of a temple brought about by a not very clearly defined enemy. Often, as in some of the tablets here, the grief of the deity over leaving the ruined temple is portrayed in long litanies. Other *balag* compositions have narratives based on a mythical event often unknown to us. The glorification or self-praise of a deity as the central theme is found in other *balags* as well. As opposed to the hymns and prayers of other types in the Emesal literature, the *balags* were so long that they were usually spread over several tablets, numbered by the scribes and each supplied with a “catch-line” referring to the following tablet. In the first millennium B.C. the *balag* songs were often accompanied by another song, which formed the conclusion to the *balag* composition and which was performed with the musical accompaniment of a drum-like instrument (Sum.: *šèm*, Akk.: *halhallatu*). These hymns were called *eršemmas* (ér-šèm-ma), “lamentation (to be accompanied by) the *šem*-instrument.”

Eršemmas are the second largest group of Emesal literature.⁸ They contain litanies and prayers for “soothing the heart” of a god and are often of considerable length. *Eršemmas* were not only used as the conclusion of a *balag* composition; they were also recited independently of *balags*, as autonomous songs performed by the *kalû* singer during the course of a ritual event.

A third type of Emesal prayers was called *šuilla* (literally: “raising the hands”).⁹ These prayers consist of long litanies of a hymnic character, often including a petition to calm the anger of the deity who was being addressed.¹⁰ They were often recited in public rituals connected with the processions of the gods.¹¹

The fourth large category of Emesal prayers was called *eršahunga* (literally: “lamentations to soothe the heart”).¹² *Eršahungas* are often arranged in the form of a litany. After the initial address to a deity, they contain a lamentation describing the personal suffering of the worshipper. Prayers for his welfare follow, as well as a prayer to other gods to enter a plea for this petitioner to the deity to whom the prayer is addressed.¹³ Texts of *eršahungas*, *balags*, and *eršemmas* existed as early as Old Babylonian times (see text No. 1). The clay tablets edited here belong to

the latest corpus of cuneiform literary inscriptions (second to first century B.C.) and prove that the tradition of Emesal literature lasted nearly two millennia.

Although “singers of lamentations” are already attested in texts from the end of the third millennium through the following Old Babylonian period,¹⁴ we know very little about the function of the *kalû* singer in ritual and cult during that time span. Generally, we do not know on which occasions the *kalû* performed the Emesal songs and prayers.¹⁵ Only descriptions of rituals from the first millennium B.C. provide extensive information. Balags, eršemmas, šuillas, and eršahungas were performed by the “singers of lamentations” in the framework of an exactly fixed, regular cult of the temples in the various cities. Cult calendars from Ashur,¹⁶ Uruk,¹⁷ and Sippar¹⁸ are known from Neo-Assyrian and Neo-Babylonian times with mention of the dates for the recitals of Emesal songs and prayers. Most likely the wrath of the gods was meant to be averted and their favor provoked through the recital of lamentations in connection with such worship.¹⁹ However, *kalû* singers also performed Emesal songs and prayers at the performance of building rituals.²⁰ When a part of a temple was torn down and then rebuilt, the *kalû* was required to address balags, eršemmas, and eršahungas to the gods. Clearly, the destruction of a temple by an enemy (a subject for many balags) would be analogous to the demolition of parts of a dilapidated temple and their rebuilding. The recitation of these lamentations was presumably a device to avert the wrath of the deity, who might be upset by the initial destruction before the rebuilding of the temple. In addition the *kalû* singer would also perform Emesal songs and prayers in other, mostly apotropaic rituals,²¹ for instance, when a new statue of a god was brought into the temple,²² in so-called war rituals to avert an attack by an enemy,²³ in rituals to protect the royal troops and horses against disease,²⁴ and in rituals that sought to avert a calamity that had been predicted by signs or omens but had not yet taken place.²⁵ Lamentation singers also performed Emesal songs in rituals intended specifically to pacify the wrath of the gods.²⁶ It is not entirely clear on which occasions the texts here were meant to be performed by the lamentation singers, but the colophons of the recorded Emesal songs and prayers clearly indicate that the texts were written down for performance, and not only for archival purposes. Many of these texts have a notation in the colophon that they were “copied for recitation” (*ana zamāri nashī*).²⁷

The study of the bilingual texts published here was initially undertaken by Dr. Konrad Volk. He had already identified and transliterated most of the texts and joined two fragments (MMA 86.11.349 and MMA 86.11.365; see below pp. 32–41). When Volk showed this writer his transliteration of the fragment MMA 86.11.298 (see below p. 102), it became clear that this tablet fragment should join the tablets VAT 268 and VAT 443, which had previously been published by G. Reisner in *SBH*, p. 125 no. 74.²⁸ It was thus very likely that more tablet fragments in The Metropolitan Museum of Art would join the fragments published by Reisner. The Berlin texts had been acquired by the Königliche Museen zu Berlin (the present Vorderasiatisches Museum was then part of the Königliche Museen zu Berlin), in the same year as the tablets in New York, namely 1886. Further study of the colophons of both groups of texts (where inter alia scribes and owners of the tablets are named) revealed that the Berlin texts and the New York texts originally belonged to one and the same ancient library. K. Volk and I. Spar graciously agreed that since the present writer had collated all the texts published in *SBH*,²⁹ he should take over the publication of the New York texts. It should be noted that Volk had done much preliminary work.

A suspicion was thus aroused that more joins could be made between Emesal texts in The Metropolitan Museum of Art and those in Berlin published by Reisner. The simplest way to deal with the matter was to bring the two groups of tablets together, so that suspected joins could be confirmed on the spot. So in summer 1990 the New York tablets, courtesy of The Metropolitan Museum of Art, were shipped on loan to the Vorderasiatisches Museum, Berlin. Thanks are due to the Metropolitan Museum, in particular to Dr. Prudence O. Harper, then Curator in Charge,

Department of Ancient Near Eastern Art, for this farsighted and generous decision, and to the Vorderasiatisches Museum, especially to Dr. Liane Jakob-Rost, then Director of the Museum, and to her colleagues Drs. Evelyn Klengel and Joachim Marzahn, for their most friendly cooperation. This was all the more appreciated because the loan took place when Berlin and Germany were still divided, and the tablets had to cross the border between West Berlin and East Berlin.

The following joins between New York and Berlin texts were confirmed from the originals:³⁰

MMA 86.11.286A + MMA 86.11.286B + MMA 86.11.259 + SBH 63 (VAT 210)

MMA 86.11.298 + SBH 74 (VAT 268) + SBH 74 (VAT 443)

MMA 86.11.346 + SBH 60 (VAT 370¹ + VAT 1745¹ + VAT 1749¹ + VAT 1811¹ + 4 fragments [!]) +
SBH 84 (VAT 1831)

MMA 86.11.347 + SBH 35 (VAT 418 + VAT 424 + VAT 1744 + 1 fragment)

MMA 86.11.348 + SBH 82 (VAT 231 + VAT 305 + VAT 1766 + VAT 1775 + VAT 2189 + 2 fragments)

MMA 86.11.360 + SBH 50 (VAT 415 (+)³¹ VAT 581

Further joins are:

MMA 86.11.288 + MMA 86.11.557

MMA 86.11.360 + MMA 86.11.544 + MMA 86.11.546 + MMA 86.11.551.

To these we can also add K. Volk's join:

MMA 86.11.349 + MMA 86.11.365

Our knowledge of which tablets were available in the family archive of a *kalû* singer in the Seleucid-Arsacid period was considerably increased by the discovery that the New York and Berlin texts published by G. Reisner belonged to the same library. Substantial numbers from the original inventory of tablets are, however, still missing. They may possibly have arrived on the antiquities market the same year as the tablets acquired by The Metropolitan Museum of Art and the Berlin Museum and may have been bought by private collectors or other museums.

Except for a hymn to the god Marduk in the Sumerian main dialect with interlinear Akkadian translation (text No. 18), the rest of the bilingual texts presented in this section are all Emesal prayers. Three of the four types of Emesal prayers are represented in this corpus: balags, eršemmas, and one šuilla.

Table of MMA Bilingual Emesal Prayers and Hymns

I. Balags:³²

Text No. 2 MMA 86.11.347

balag no. 1:³³ abzu pe-el-lá-àm, to Enki (excerpt tablet: excerpts from the balag and the accompanying eršemma)

Text No. 3 MMA 86.11.182

balag no. 4: ⁴Utu-gin₇ è-ta, to Enlil (xth *nishu*)³⁴

Text No. 4 MMA 86.11.349 + 86.11.365

balag no. 28: nir-gál lú è-NE, to Ninurta (2nd *nishu*)

Text No. 5 MMA 86.11.348

balag no. 37: im-ma-al-(la) gù dé-dé, to Innnin (2nd tablet)

Text No. 6 MMA 86.11.279

balag no. 37: im-ma-al-(la) gù dé-dé, to Innnin (assignment not certain)

- Text No. 7 MMA 86.11.286A + MMA 86.11.286B (+) MMA 86.11.529
balag no. 44: a-še-er gi₆-ta, to Innn/Ishtar (4th *nishu*)
- Text No. 8 MMA 86.11.346
balag: a abzu-mu (xth *nishu*)
- Text No. 9 MMA 86.11.289
balag: unidentified, to Nergal(?)
- Text No. 10 MMA 86.11.350
balag: unidentified, to Innn/Ishtar(?)
- Text No. 11 MMA 86.11.3/60 + MMA 86.11.517 + MMA 86.11.544 + MMA 86.11.546 + MMA 86.11.551
+ MMA 86.11.553 + MMA 86.11.555
balag: unidentified
- Text No. 12 MMA 86.11.300
balag: colophon fragment

II. Eršemmas:

- Text No. 13 MMA 86.11.351
eršemma no. 1:³⁵ dilmun^{ki} nigin-na, to Marduk
- Text No. 14 MMA 86.11.288 + MMA 86.11.557
collection of eršemmas (nos. 45, 59, 53)

III. Šuilla:

- Text No. 15 MMA 86.11.298
šuilla: nir-gál lú è-NE

IV. Fragments of Emesal prayers

- Text No. 16 MMA 86.11.285
unidentified
- Text No. 17 MMA 86.11.476
unidentified

V. Hymn to Marduk (Sumerian main dialect)

- Text No. 18 MMA 86.11.313

1. See CTMMA 1, pp. xiii–xiv.
2. Cf. the genealogy of the family in Hunger, *Kolophone*, p. 19.
3. As yet, the oldest dated tablet from this library dates to the year 137 B.C. (*SBH* 5), and the latest to the year 86 B.C. (*SBH* 27 and *SBH* 55).
4. See the comprehensive presentation by J. A. Black, “Eme-sal Cult Songs and Prayers,” *AuOr* 9 (1991), pp. 23–36.
5. For the Emesal dialect see M. K. Schretter, *Emesal-Studien. Sprach- und Literaturgeschichtliche Untersuchungen zur sogenannten Frauensprache des Sumerischen*, Innsbrucker Beiträge zur Kulturwissenschaft, Sonderheft 69 (Innsbruck, 1990) with further bibliography.

6. For the balag songs compare the edition by Cohen, *CLAM* 1, 2; see also the selected bibliographies in the present volume on pp. 3–4, 16).
7. J. A. Black, “Eme-sal Cult Songs and Prayers,” *AuOr* 9 (1991), p. 28 with n. 39, has a different opinion.
8. For the eršemmas see Cohen, *Eršemma*, and further, Krecher, *Kultlyrik*, pp. 19–25 and pp. 29–30. Cf. also Maul, “Wenn der Held,” pp. 312–34.
9. Raising the hands was a gesture of prayer. In addition to the Sumerian šuilla prayers written in the Emesal dialect, there were also prayers written in the Akkadian language that were called šuilla. These prayers, however, are quite different in content, construction, and ritual function from their Sumerian counterparts. Cf. the study of the Akkadian šuilla prayer by W. R. Mayer, *Untersuchungen zur Formensprache der babylonischen “Gebetsbeschwörungen”*, Studia Pohl: Series Maior 5 (Rome, 1976).
10. For the Sumerian šuillas see J. S. Cooper, “A Sumerian Šu-il-la from Nimrud,” pp. 51–67; idem, “Warrior, Devastating Deluge, Destroyer of Hostile Lands: A Sumerian Šuila to Marduk,” in E. Leichty et al., *Scientific Humanist*, pp. 83–93; and M. E. Cohen, “A Bilingual Šuilla to Ningēštinanna,” in H. Behrens et al., *DUMU-E₂-DUB-BA-A: Studies in Honor of Åke W. Sjöberg*, Occasional Publications of the Samuel Noah Kramer Fund 11 (Philadelphia, 1989), pp. 79–85.
11. S. M. Maul, “Marduk, Nabû und der assyrische Enlil. Die Geschichte eines sumerischen Šu’ilas,” in S. M. Maul, ed., *Festschrift für Rykle Borger zu seinen 65. Geburtstag am 24. Mai 1994: tikip santakki mala bašmu*, Cuneiform Monographs 10 (Groningen, 1998), pp. 179–83 and 188–91.
12. Cf. the edition of these texts by Maul, “Herzberuhigungsklagen,” and further S. M. Maul, “Zwei neue ‘Herzberuhigungsklagen,’” *RA* 85 (1991), pp. 67–74.
13. A full treatment is given in Maul, “Herzberuhigungsklagen,” pp. 17–24.
14. Compare J. A. Black, “Eme-sal Cult Songs and Prayers,” *AuOr* 9 (1991), p. 26; Cohen, *CLAM* 1, p. 13, and further D. Charpin, *Le clergé d’Ur au siècle d’Hammurabi* (Geneva, 1986), pp. 250, 405, and 410, as well as W. Sallaberger, *Der kultische Kalender der Ur III-Zeit* (Berlin, 1993), pp. 149–50.
15. See the collected passages given by J. A. Black, “Eme-sal Cult Songs and Prayers,” *AuOr* 9 (1991), p. 26, and further Cohen, *CLAM* 1, p. 13.
16. S. M. Maul, “Die Frühjahrsfeierlichkeiten,” pp. 389–420.
17. TCL 6, 48 (edition: Langdon, “Calendars of Liturgies and Prayers,” pp. 120–23).
18. S. M. Maul, “Gottesdienst im Sonnenheiligtum zu Sippar,” in Barbara Böck, Eva Cancik-Kirschbaum, and Thomas Richter, eds., *Munuscula Mesopotamica: Festschrift für Johannes Renger*, AOAT 267 (Munich 1999), pp. 285–316.
19. Cf. Cohen, *CLAM* 1, p. 14, and M. E. Cohen, *Balag-Compositions: Sumerian Lamentation Liturgies of the Second and First Millennium B.C.*, Sources from the Ancient Near East 1/2 (Malibu, 1974), p. 15.
20. O. R. Gurney and J. J. Finkelstein, *The Sultantepe Tablets* 2, Occasional Publications of the British Institute of Archaeology at Ankara 7 (London, 1957), no. 232 (edition: Maul, “Herzberuhigungsklagen,” pp. 46–52).
21. See the summary in Maul, “Herzberuhigungsklagen,” pp. 29–56.
22. See W. R. Mayer, “Seleukidische Rituale aus Warka mit Emesal-Gebeten,” *OrNS* 47 (1978), pp. 431–58.
23. See M. Elat, “Mesopotamische Kriegsrituale,” *BiOr* 39 (1982), pp. 5–25, and Maul, “Herzberuhigungsklagen,” pp. 30–31 and pp. 44–46.
24. See R. Caplice, “Namburbi Texts in the British Museum IV,” *OrNS* 39 (1970), pp. 118–24 and pls. III–IV.
25. E.g., *RAcc*, pp. 34–40.
26. See the survey in Maul, “Herzberuhigungsklagen,” p. 30.
27. See text No. 3:rev. 6'; text No. 4:L.E. 2, and text No. 5:rev. 17'.
28. G. Reisner already recognized that these two fragments are from the same tablet.
29. These collations will be published by S. M. Maul. Maul completed the present text in 1993.
30. SBH 35 + MMA 86.11.347; SBH 50 (VAT 581) + MMA 86.11.360 (+) SBH 50 (VAT 415); SBH 60 + SBH 84 + MMA 86.11.346; SBH 63 + MMA 86.11.286A + MMA 86.11.286B + MMA 86.11.529; SBH 74 (VAT 268) + SBH 74 (VAT 443, previously only an indirect join) + MMA 86.11.298; SBH 82 + MMA 86.11.348; SBH 84 + SBH 60 + MMA 86.11.346.
31. The fragments VAT 415 and VAT 581 (published as SBH 50) cannot be joined physically (too much of the tablet core is lost). However, as G. Reisner realized, they undoubtedly belong to the same tablet.

32. The balags here are organized in the “canonical” order from the first millennium B.C. (cf. Black, “Sumerian *Balag* Compositions,” pp. 31–79, and the Catalogue IV R² 53 (K 2529) + Langdon, *BL* 103 (K 3276) + K 16853 (unpublished; join: R. Borger).
33. Numbering of Black, “Sumerian *Balag* Compositions,” pp. 37–54.
34. The designation *xth nishu* indicates that the original number is not preserved.
35. Numbering of Cohen, *Eršemma*, p. 7.

Selected Bibliography

- J. Black, “A-še-er Gi₆-ta, a Balag of Inanna,” *Acta Sum.* 7 (1985), pp. 11–87
- idem, “Eme-sal Cult Songs and Prayers,” *AuOr* 9 (1991), pp. 23–36
- idem, “Sumerian *Balag* Compositions,” *BiOr* 44 (1987), pp. 31–80
- R. Borger, “Schlüssel zu M. E. Cohen, CLAM,” *BiOr* 47 (1990), pp. 5–39
- M. E. Cohen, *Balag-Compositions: Sumerian Lamentation Liturgies of the Second and First Millennium B.C.*, Sources from the Ancient Near East 1/2 (Malibu, 1974)
- idem, *The Canonical Lamentations of Ancient Mesopotamia*, 2 vols. (Potomac, Md., 1988)
- idem, *Sumerian Hymnology, The Eršemma*, Hebrew Union College Annual, Suppl. 2 (Cincinnati, 1981)
- J. Krecher, *Sumerische Kultlyrik* (Wiesbaden, 1966)
- S. H. Langdon, *Babylonian Liturgies* (Paris, 1913)
- idem, “Calendars of Liturgies and Prayers,” *AJS* 42 (1925/26), pp. 110–27
- S. M. Maul, ‘Herzberuhigungsklagen,’ *Die sumerisch-akkadischen Eršahunga-Gebete* (Wiesbaden, 1989)
- idem, “Wenn der Held (zum Kampfe) auszieht . . . Ein Ninurta-Eršemma,” *OrNS* 60 (1991), pp. 312–34
- W. R. Mayer, *Untersuchungen zur Formensprache der babylonischen “Gebetsbeschwörungen.”* Studia Pohl: Series Maior 5 (Rome, 1976)
- G. A. Reisner, *Sumerisch-babylonische Hymnen nach Thontafeln griechischer Zeit*, Mittheilungen aus den orientalischen Sammlungen 10 (Berlin, 1896)
- H. C. Rawlinson, *The Cuneiform Inscriptions of Western Asia, Vol. IV: A Selection from the Miscellaneous Inscriptions of Assyria*, Prepared . . . by . . . Sir H. C. Rawlinson . . . , Second Edition (London, 1891)

No. 2

Balag: abzu pe-el-lá-àm, to Enki

Introduction

The small fragment MMA 86.11.347 joins the tablet *SBH* 35¹ tightly, as can be seen in the drawing on the next page. A piece approximately the same size as MMA 86.11.347 is missing from the top right corner. The small fragment VAT 1744 that preserves the top edge of the tablet, as well as another small fragment of the left edge, have been joined to the tablet published by Reisner in *SBH*, p. 65 (VAT 418 + VAT 424 + an unnumbered fragment). Both of these fragments were published in the addenda to *SBH*, p. 153.² More than half of the original tablet is still missing, in spite of the join of MMA 86.11.347 and *SBH* 35.

MMA 86.11.347+ was written in 134 B.C. by Marduk-zēr(a)-ibni, when he was still a *kalū* apprentice.³ The obverse of the tablet has excerpts from the balag to the god Enki: *abzu pe-el-lá-àm*,⁴ edited by M. E. Cohen in *CLAM* 1, pp. 47–64.⁵ Preserved on the reverse are the last lines of an eršemma, which was probably performed in connection with that balag.⁶

The present tablet occupies a special place among the balag tablets from the library of the Nanna-ù-tu family. Unlike most balag tablets from this library, MMA 86.11.347+ was not written “for recitation” (*ana zamāri*) of the Emesal composition; rather, the tablet served as a commentary. The Sumerian lines have interpretations in Akkadian, which are not so much precise translations as a theological interpretation of the ancient Sumerian text.⁷

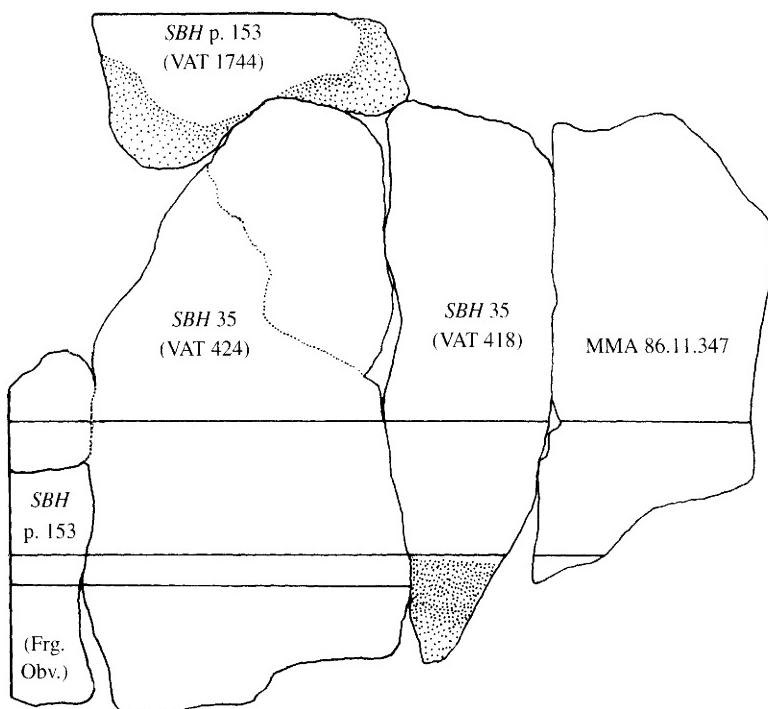
1. The passages preserved on *SBH* 35 are underlined in the transliteration.
2. M. E. Cohen’s statement in *CLAM* 1, p. 47, “Since Reisner’s publication of the tablet, another fragment containing parts of the first thirteen lines of the lamentation has been joined,” is incorrect. The upper edge of the tablet is already there in *SBH*, p. 153, with the join of fragment VAT 1744.
3. MMA 86.11.347+ has two dates, as do many other tablets from the library of the Nanna-ù-tu family (the Arsacid year is followed by the corresponding Seleucid year), since Babylonia was ruled by the Parthians from the thirties of the second century B.C. (cf. Oelsner, “Randbemerkungen zur arsakidischen Geschichte,” p. 30).
4. MMA 86.11.347 + *SBH* 35 contains lines 1, 12(?), 13, 14, 15, 17–22, 28–30, 41, 63, 79–80 of the balag *abzu pe-el-lá-àm* according to M. Cohen’s line count in *CLAM* 1, pp. 47–57.
5. See also Black, “Sumerian Balag Compositions,” pp. 37–38 no. 1, and Borger, “Schlüssel zu M. E. Cohen, *CLAM*,” p. 18.
6. See Cohen, *CLAM* 1, pp. 47–48, and the commentary to rev. 11’.
7. See Notes to the present text and S. M. Maul, “Küchensumerisch oder hohe Kunst der Exegese? Überlegungen zur Bewertung akkadischer Interlinearübersetzungen von Emesal-Texten,” in B. Pongratz-Leisten, H. Kühne, and P. Xella, eds., *Ana šadī Labnāni lū allik: Beiträge zu altorientalischen und mittelmeerischen Kulturen. Festschrift für Wolfgang Röllig*, AOAT 247 (Neukirchen-Vluyn, 1997), pp. 253–67.

2.

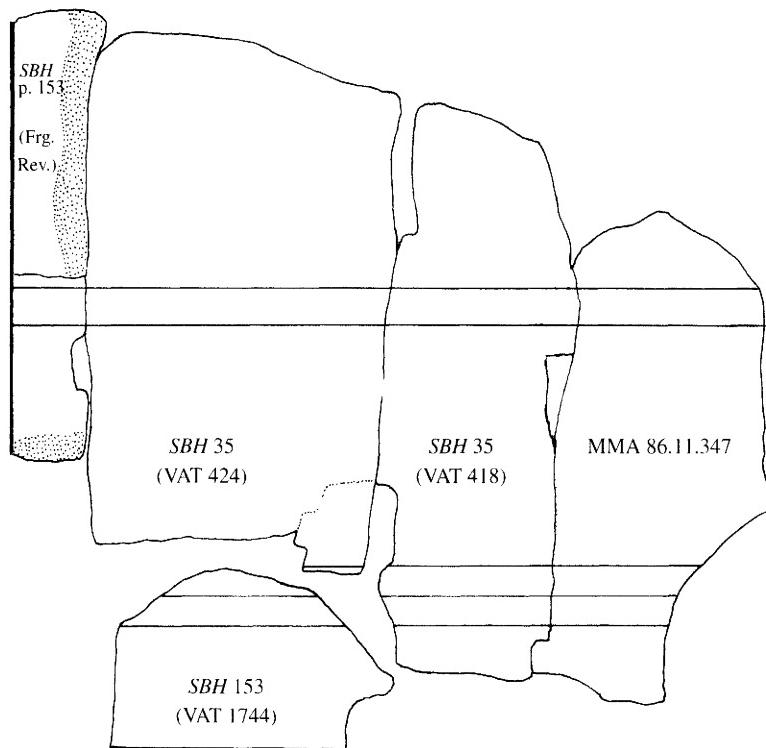
MMA 86.11.347 + [SBH 35 + (VAT 418 +
VAT 424 + VAT 1744 + unnumbered fragment)]
Plates 3, 4
H. 70 mm W. 37 mm Th. 27 mm

Balag: abzu pe-el-lá-àm, to Enki
S.E. 178 = 134 B.C., Babylon

Obverse



Reverse



Upper Edge

[ina a-mat ḷ-bēlī(EN) u ḷbēlī(GAŠAN)-iá liš-lim]

Obverse

1. [abzu pe-el-lá-ám]
 2. [.....]
 3. [Úru-zí-ib^{ki}]
 4. [é-engur-ra]
 5. [é-engur-ral]
 6. [mu-úri-na]
 7. [kisal-mah-a abzu]
 8. [kisal-mah-á]
 9. [kisal-mah-a(?) abzu gal-gal-la(?)-mu]
 10. [bára kú]
 11. [x x a-še-er-er-á-mu]
 12. [é ma-al-á]
 13. [empty)

 14. [abzu peš₁₀-peš₁₀-e
[empty)]

 15. [é zi-da]
 16. [é^dAm-an-ki-ga]
 17. [é^dAm-an-ki-ga pe-el-lá-šé]
 18. [na-ám é pe-el-lá]

 19. [MU^{mēš} NU BÚR^{mēš} šá abzu pe-el-lá-ám . . .] x [. . .] x [. . .]
(rest of obverse of MMA 86.11.347 broken)
- [ap-su-ú šá ri-šá-a-ti Eri-du₁₀ šá ta-na-da-a-ti]
[ib-ha-nu(!?-ú)]
[Eri-du₁₀ šá ina ašri x x x (?) : (?)ta-a-bi ib-ba-nu-ú : bu-¹un¹-[nu-ú]]
[bít apsi ša ša-qu-um-ma-ti-[i]a : šu-qam-m[u-mu]
[bít en-gur-ru šá qé-reb-šú] el-[lu]
[šá ú-ri-in-na-ku-šú ú-tal-li-lu] : ú-ri-in-nu ul¹'lu¹-[lu]
[ki-sal-lu si-i-ri ap-su-ú se-e] b-rut-ti-ja : ba-an-dù-à[m]
[ki-sal-lu si-i-ri apsí(ABZU)ⁱ]
[nap-ha-čar(?) šum-du-lum apsí(ABZU)ⁱⁱ]
[parak el-lu šá ana si-it-dŠamší(UTU)ⁱⁱⁱ]
[šu(!)-bat]
[ana é-kal-lum šá kád-re-e]
: ú-a ma-al-la**bi**(?) . . .]
- [ap-su-ú kib-ri ana kib-ri mi-nam út-t]a-nu-ru mi-nam ú-ta-[r. . .]
[mi-nam im-ta-na-har šá ap-su-ú kib-ru šú mi-nam ut-ta-ab-b]a-ti :
mi-nam in-na-aq-q[á-ru]
[bitu(É) ki-i-ni ap-su-ú kib-ri ana kib-r]i mi-nam it-ta-nu-r[u]
[bit(É) dÉ-a kib-ri ana kib-r[i]
[bit(É) dÉ-a ana šá šul-pu-tú i nul]-ú-ri-lh-[šú]
[aš-šum bit(É)-šú šul-pu-tú áli(URU)-šú šal-la x]-im dim-ma-tum i[. . .]
mu-un-ma-ma]
- [te ma-gi₄-gi₄-gi₄]
- [peš₁₀-peš₁₀-e te (empty)]
[peš₁₀-peš₁₀-e]
[an-ši-ul₄-dè-en-dè-en]
[úru ir-ra-na e-ne-šé]

Reverse
[...]

- 1'. [an dè-èm-hun-gá] [ki dè-èm-sed-dè]
[a umun-e] [an dè-èm-hun-gá]
- 2'. [ur-sag ^dAsal-lú-hij] [qar-ra-du ^dMarduk(AMAR.UTU) šá-mu-ú] [i-ni-ih(1) (tablet: HI)-hu-ka
[mu-ud-na ki-ág-zu ^dPap-nun-an-ki-ke₄] [hi-ir-tum na-ra-am-ta-ka ^dZar-pa-ni]-tum taş-lit liq-bi-ka
[sukkal-zi-^dMu-zí-ba-sa₄-al] [siuk-kal ki-nu(1) ^dNa-bi-um] MIN MIN
[é-gi₄-a dumu-sag ^dUráš-a] [ka-lat mar-tum reš-ti-tum šá ^dUráš(1)] MIN MIN
7'. [égi zi-da Gašan-KA-UR-a-sì-ga-ke₄] [ru-bat kit(1)-tum ^dTaš-me-tum] (erasure) MIN (erasure: MIN MIN) MIN
[égi gu-la gašan-mu ^dNa-na-a] [ru-bat ra-hi-tum be -el-tú ^dNla-na-a] MIN MI[N]
9'. [úru-zu na-an-šub-hé-en dè-ra-ab-bé] [á(URU)-ka la ta-nam-di liq-bu]-ka taş-lit liq-bu-ka [a-ra-zu dè-ra-ab-bé]
- 10'. [me-na-še Tin-tirkⁱ na-an-šub-bé-en dè-ra-ab-bé] [adi mati Ba-bi-lí la ta-nam]-di liq-bu-ka taş-lit liq-bu'-[ka] [a-ra-zu dè-ra-ab-bé]
- 11'. [MU^{mēš} NU BÚR^{mēš} šá é-a(?)-(a[?]: written over erasure) KU(?) x NE] ana KA-[...]
- 12'. [^{im}DUB ^{Id}IDIM-TIN-su-E A šá ^dEN-A-M]U A [Nan[na.ú.tu]]
- 13'. [gáti ^{Id}ŠÚ-NUMUN-DÙ A-ŠÚ lú galat^atur-ru ^dMarduk(ŠÚ.KA)M*] Eki iti [X UD.X.KAM*]
- 14'. [MU 1 ME 14.KAM* šá ſí-i MU 1 ME 78.KAM* A]r-[Šá-ka-a LUGAL]

Translation

Upper Edge: Epigraph

[At the command of the Lord and My Lady may (what I am doing) be successful.]

Obverse

1. [The *apsû* has been defiled; Eridu has been pillaged!]
Akk.: [*Apsû* of joy, Eridu of praise!]
2. [In this *apsû*, which has been built on a pure place,]
3. [in this (city) of Eridu, which has been built on a good place,]
Akk.: [Eridu, which has been bui]It : is built {on a . . . : good place,}]
4. [my still E'engurra,]
Akk.: [the house of the *apsû*, the one (giving) m]e [stillness] : is still,
5. [my E'engurra of which the interior is holy,]
Akk.: [the house of the *engurru*, of which the interior is] holy,
6. [my standard, which has been purified,]
Akk.: [(and) of which the standards have been purified] : the standards [are] purified,
7. [in the main courtyard the *apsû*] has been built up(?) : [(the main courtyard), my “little *apsû*,”]
Akk.: [the main courtyard, the *apsû* of] my youth,
8. [the main courtyard, my “very big *apsû*”,]
Akk.: [the main courtyard, the *apsû* of m]y adults,
9. [the main courtyard(?), my “very big *apsû*,” my perfect beauty,]
Akk.: [the entire extent of the *apsû* of m]y adults
10. [my holy throne], set up [facing the direction of the sunrise,]
11. [(. . .) my city(?) of sighing, . . .]
Akk.: [the seat of] my sighing [. . .],
12. [my open house into which gifts were brought,]
Akk.: [to the palace into which gifts] were brought,
13. [. . .]
Akk.: the house of the lord [. . .]

14. [Why does the *apsû* constantly turn against me at every shore?]
Akk.: [Why does the *apsû*] constantly turn (against me) [at every shore]? Why does it . . . [.](?)
[Why does it confront constantly? Why have the shores of the *apsû* been] destroyed? Why are they demoli[shed?]
15. [Faithful house, why (does the *apsû* constantly turn against me) at every shore?]
Akk.: [Faithful house], why does {the *apsû*} constantly turn (against me) [at every sho]re?
16. [House of Enki, (why does the *apsû* constantly turn against me) at every shore?]
Akk.: [House of Ea], (why does the *apsû* constantly turn against me) at every shore?
17. [To the defiled house of Enki we are hurrying.]
Akk.: [The house of Ea, to the one which has been defiled, let us] hurry!

18. [Because of her desecrated house and of her pillaged city she goes to him.]
 Akk.: [Because of her(!) defiled house and her(!) pillaged city] . . . the weeping . . .
-
19. [Uninterpreted(?) lines of the balag abzu pe-el-lá-àm . . .] . . . [.] . . . [.] . . .
 (rest of obverse broken)

Reverse

- 1'. [May the heavens quiet you! May the earth] appease you!
- 2'. [O lord, may the heavens] quiet you!
- 3'. [Warrior Asalluhi/Marduk, may the heavens] quiet you!
- 4'. [May your beloved spouse, Papnunanki/Zarpān]itum, utter a prayer to you!
- 5'. [May the faithful vizier Muzibbasâ/Nabû] utter a prayer to you!
- 6'. [May the daughter-in-law, the first born of Uraš] utter a prayer to you!
- 7'. [May the faithful princess Gašan-KA-UR-a-sì-ga/Tašmētum] utter a prayer to you!
- 8'. [May the supreme princess, the (Sum.: my) lady, Njanâ utter a prayer to you!]
- 9'. [“You should not reject your city!” may they say] to you! May they utter a prayer to you!
-
- 10'. [“For how long again? You should not re]ject [Tintir/Babylon!]” May they say to you! May they utter a prayer to you!
-
- 11'. [Uninterpreted(?) lines of (the eršemma) é-a(?) KU . . . x NE], . . . [.] . . .
-
- 12'. [Tablet of Ea-balâssu-iqbi, the son of Bēl-apla-id]din, the son of Nan[na-ù-tu (. . .)]
- 13'. [Hand of Marduk-zēr(a)-ibni, his son, the *kalû* apprentice of Mar]duk. Babylon, [the xth day of the] month [.] . . .
- 14'. [Year 114 (of the Arsacid era), that is the year 178 of the Seleucid era, (when) A]r[sakes was king.]

Notes

Obverse

- 1–3: Ll. 1–3 are preserved in the fragment joining *SBH* 35 (VAT 1744) (see *SBH*, p. 153). It is not clear from the copy of the fragment (*SBH*, p. 153) that this piece preserves the upper edge of the tablet. What remains of the epigraph, which occurs on the upper edge of many tablets from the library of the Nanna-ù-tu family, was overlooked by Reisner and was not included in *SBH*, p. 153. The small litany following 1. 1 in the duplicate, BM 54745 (see Cohen, *CLAM* 1, pp. 48–49, ll. 2–11) is missing in MMA 86.11.347+.
- 2: This line cannot be restored with certainty from the remaining traces. However, it is very likely that BM 54745:obv. 23–24 (Cohen, *CLAM* 1, p. 49, l. 12) completes the line: abzu ki sikil-la dù-a-ba = *apsû ša ina ašri elli innepšu*.
- 3: zí-ib-ba probably corresponds to one other Akkadian word (indicated by the double *winkelhaken* before *ta*) in addition to *tābu* in the Akkadian version of the line.

- 4–5: E³engurra, the name of Enki's temple at Eridu, is translated rather than transcribed in the Akkadian version of ll. 4 and 5, contrary to usual scribal practice. L. 5 of the BM 54745 version of the balag (cf. Cohen, *CLAM* 1, p. 49) is missing.
- 6: The Emesal form mu-ùri-(na) corresponds to the main dialect giš-ùri-(na) (cf. MSL 4, p. 21, 149). The Akkadian loan-words *urinnu* and *urinnakku* as well as *urigallu* indicate that the element giš/mu was not an integral part of the Sumerian word. Usually ùri is preceded by the determinative gi.
- 7: The parallel construction of the next line shows that the reading bān-da-mu (cf. gal-gal-la-mu, in l. 8) is preferable to the variant ba-an-dù-àm.
- 9: The restoration of the first half of the line is not entirely certain. It is possible that there was enough space for two or three signs before the very squeezed [. . . abzu gal-gal]-la-mu, in *SBH* 35:obv. 8. The restoration of the second half of the Sumerian line follows BM 54745:37 (cf. Cohen, *CLAM* 1, p. 49, l. 19).
- 11: This line does not have an exact parallel in the duplicate BM 54745. There, in ll. 41–42 (= Cohen, *CLAM* 1, pp. 49–50, l. 21), we have instead:

41. Tin-tir^{ki} úru a-še-er ma-al-l[a-mu]
42. Ba-bi-lì šá ana ta-ni-ḥi iš-šak-nu

My Babylon, which was assigned to sighing

In *SBH* 35:obv. 11 there is room for only two signs before a-š[e-e]r-ra-mu. Possibly the second sign can be read 'úru¹ (uncertain). úru, then, should be rendered *šabtu* in the Akkadian version of the line.

- 12: The Akkadian version of the line erroneously assumes that é-ma-al-(la) is the Emesal form of é-gal-(la) [instead of é gál-(la)]. For the translation of é gál-(la) compare gál = *petû*, “to open” (see e.g., *SBH* 44:obv. 10–11, and Cohen, *CLAM* 1, p. 62, for this line [there: l. 22]).
- 13: This writer cannot explain the variants to 1. 12 noted here. The connection between the Sumerian and Akkadian versions remains obscure. Was the scribe perhaps thinking of umun (ú instead of U(?)) and ma = *bītu*(?). The following five lines (= Cohen, *CLAM* 1, p. 50, ll. 23–27) are missing here. The entire first part of the balag consists of a single sentence that is incomplete in MMA 86.11.347+1–13. The meaning of the sentence does not become clear until ll. 25–27 (according to the count in Cohen, *CLAM* 1, p. 50):

25. i-bí-bé ér-ra šà-bé ér-ra-àm
pa-nu-šu bi-ki-tu₄ lib-ba-šú bi-ki-tum-ma
26. i-bí-bé ér-ra mu-lu mu-un-ku₄-ku₄
pa-nu-šu ina bi-ki-tu₄ a-wi-la₁₁ ú-še-er-ri-bu
27. šà-bé a-še-er-ra mu-lu im-ta-è-a
lib-ba-šu ina ta-ni-ḥi a-wi-la₁₁ ú-še-eṣ-ṣa-a

25. At its front (i.e., at the front of the *apsû*) are tears; at its interior are tears;
26. at its front one enters in tears;
27. from its interior one exits in sighing.

- 14: The Akkadian version has no fewer than five different translations of the Sumerian line.
- 17–18: These lines, with few variants, develop into a short litany in the duplicate BM 54745 (cf. Cohen, *CLAM* 1, p. 51, ll. 39–41). The MMA version of the text skips the next twenty-one lines (cf. Cohen, *CLAM* 1, pp. 51–52, ll. 42–62). In this section Enki and his consort, Damgalnunna, leave the *apsû*, because it has become “soiled” by a not clearly defined enemy, as already intimated in the opening lines of the balag. Damgalnunna turns to Enlil in her grief (cf. Cohen, *CLAM* 1, pp. 51–52, ll. 46–67, and especially p. 52, l. 62) with the following complaint: me-na-še [ur₅]-ra-bi, “How long (will) this humiliation (last)?”

- 18: The Sumerian version of the line has been restored from the duplicate BM 54745 (= Cohen, *CLAM* 1, p. 51, l. 46). Damgalnunna turns to Enlil (see the commentary to ll. 17–18), who is ultimately responsible for the desecration of the temples. The Akkadian translation is different in BM 54745 (no doubt to be read as: . . . *qul-tim da-ma-<ma(?)> ul ták-la!*).
- 19: Contrary to Cohen, *CLAM* 1, p. 47, “15(?)MU^{meš} BÚR^{meš}” cannot be restored at the beginning of the line. In any case his translation “15 lines missing” is certainly incorrect. Collation of *SBH* 35 confirms the traces of signs given by Reisner in the addenda to *SBH*, p. 153. There is no number before the MU. The additional fragment in *SBH*, p. 153, was overlooked by Cohen in *CLAM* 1. In *SBH* 35:obv. 19 there are traces of a further sign before [B]ÚR^{meš}, which should probably be read N[U]. The expression MU^{meš} NU BÚR^{meš} is to this writer’s knowledge only attested in this text and is difficult to interpret. The common meaning of BÚR, *pašāru*, “to undo,” is certainly the meaning here. BÚR = *pašāru* is used not only literally but also figuratively as in “to solve problems and questions.” For example, in the Sumerian riddles published by M. Civil, the solution is called ki-búr-bi (M. Civil, “Sumerian Riddles: a Corpus,” *AuOr* 5 [1987], pp. 17–37). In a Neo-Assyrian letter from Nineveh (*ABL* 355 = S. Parpola, *Letters from Assyrian Scholars to the Kings Esar-haddon and Assurbanipal*, pt. 1, AOAT 5/1 [Neukirchen-Vluyn, 1970], 35:obv. 6–7); cf. also obv. 13–14 (*pišrāte ša šumē*), rev. 1 (*pišrātēšunu*); rev. 4 (*pišeršu*) the scribe says *ina muhhi pišri ša šume ša šarru bēli išpuranni*, “concerning the ‘undoing’ (i.e., the interpretation) of the (omen) line, about which the king, my Lord, wrote me.” (For the term *pišru*, “interpretation,” see also S. Parpola, *Letters from Assyrian Scholars to the Kings Esarhaddon and Assurbanipal*, pt. 2, AOAT 5/2 [Neukirchen-Vluyn, 1983], p. 40.) Very likely MMA 86.11.347+:obv. 19 should also be understood in this sense. The notation would then mean “uninterpreted lines from (the balag) abzu pe-el-lá-àm.” Unfortunately, it is not known what the second part of this line (and the corresponding line, rev. 11') contained. The notation in rev. 19' probably indicates that the scribe provided the Sumerian lines of a balag composition. After a dividing line in the joined fragment *SBH* 35 two further lines follow:

20. e-zé [m]u-tinim-me-ru-ka : a a x [.] . . . [[á-gur á-gur-ra-zu]
 21. máš mu-tinda-áš-šu-k[a : ú-ri-ṣu-ka šá ziq-ni zaq-nu][su₆-lá su₆-lá-zu]

These lines correspond to ll. 79–80 in the edition of the balag by Cohen in *CLAM* 1, pp. 53–54.

Reverse

SBH 35 supplies seven lines before the beginning of the reverse of MMA 86.11.347+.

- 10': The restoration me-na-šè is taken from CT 51, 189 (BM 121072):rev. 1'. CT 51, 189 contains the concluding eršemma, umun-mu za-e, to the balag abzu pe-el-lá-àm. Cf. also the parallel *SBH* 45:rev. 17 (A. Falkenstein, *Literarische Keilschrifttexte aus Uruk* [Berlin, 1931], no. 10:rev. 12 = K 3480, rev. 13). As the parallels contain the conclusion of an eršemma, we should also classify MMA 86.11.347+:rev. as an eršemma.
- 11': The sign after é is written over an erasure. The incipit of the accompanying eršemma prayer should be given in l. 11'. Besides the eršemma é-e(?) KU[. . .] NE, the balag abzu pe-el-lá-àm could also be followed by the eršemmas umun-mu za-e (cf. CT 51, 189 and the duplicate *STT* 2, no. 155 and Sm 1259) and Dilmun^{ki} nigin-na (cf. IV R² 53+:cols. i–ii 2). See in this connection the Notes to texts Nos. 13 and 14 (MMA 86.11.351 and MMA 86.11.288:rev. 22).
- 13': The reading ^dŠÚ.KAM* is certain because of the space and the parallel *SBH* 28:rev. 22: ^{ld}*Ea(IDIM)-balāt(TIN)-s[u-iqbi(E) mārū(A)-šú lú gala]-tur-ru*¹ ^d*Marduk(ŠÚ.KAM*) Bābili(E)^{ki}*, etc.

No. 3

Balag: ^dUtu-gin₇ è-ta, to Enlil*Introduction*

This tablet, MMA 86.11.182, contains the beginning and the end of a *nishu* (section) from the balag composition ^dUtu-gin₇ è-ta, addressed to Enlil.¹ Most of this *nishu* is already known from the tablet IV R² 11 (K 4613) and its duplicate K 7083.² Another version of this part of the balag ^dUtu-gin₇ è-ta is also known from the library of the Nanna-ù-tu family, namely *SBH* 33. MMA 86.11.182 and the Berlin tablet *SBH* 33, however, do not belong to the same tablet, as is evident from comparing the composition of the clay and the ductus of the two pieces. Unfortunately, the number of the *nishu* of the text with incipit dam-gàr-ra ba-da-kúr is broken off in all known copies.³

MMA 86.11.182 belonged to Marduk-bēlšunu from the Šumu-libši family, and it was probably written by his son in 145 B.C. (= S.E. 167).⁴ The ten-year-older tablet *SBH* 54 probably belonged to him originally.⁵ Like several other tablets from the Nanna-ù-tu family, MMA 86.11.182 contains many glosses, which are to be taken partly as aids to pronunciation, partly as musical notations. As the colophon states, the tablet was copied out “for recitation” (*ana zamāri*) and thus as a balag to be chanted to a deity. No doubt Marduk-bēlšunu chanted the balag composition ^dUtu-gin₇ è-ta, or perhaps only the part dam-gàr-ra ba-da-kúr, during a religious ceremony for Marduk in Babylon.⁶

In the preserved part of the obverse it is lamented that Enlil, the “merchant,” has abandoned the cities and the temples of the country.⁷ The tablet ends with a plea for Enlil to return to his city and—after he had deprived the city of its favorable destiny (obv. 12)—to write a tablet decreeing a good destiny (rev. 3'). The ancient concept that Enlil possessed the tablet on which the destiny of the whole land was decreed is related here to the idea that Enlil prepared a tablet of destiny for his own city and from time to time amended it.⁸ During the first millennium B.C. the belief was that the gods who decreed destinies had such a tablet for everyone (or at least for the king), in which the gods noted the punishments imposed on him (the king). In one prayer from the royal ritual, *Bit rimki*, the king prays that the tablets listing the sins held against him by the gods will be broken: “May the tablets of my sins be broken; may my ill portents be dispersed” (*lū hepū tuppī arnīya lū puṭṭurū lumnū'a*).⁹

1. This balag was treated by Cohen in *CLAM* 1, pp. 95–119. Cf. also Black, “Sumerian Balag Compositions,” pp. 39–40 no. 4, and Borger, “Schlüssel zu M. E. Cohen, CLAM,” pp. 19–20. The obverse of MMA 86.11.281 contains ll. a + 196–a + 210, while the reverse has ll. b + 265–b + 269 according to the count by Cohen, *CLAM*. For the obverse the following duplicates are known: IV R² 11:obv. 1–20 (with the duplicate K 7083) and VS 24:34 obv. 10–15 (= MMA 86.11.182:obv. 1–6); the Old Babylonian text PBS 10 / 2, 12:col. ii 1–11 is a parallel. For the reverse the only preserved duplicate is IV R² 11:rev. 44'–52'. *KAR* 375:col. ii 27–33 is a parallel to MMA 86.11.281:rev. 1'–4'.

The balag is listed in the catalogues BM 85564 (S. N. Kramer, “Three Old Babylonian Balag-Catalogues from the British Museum,” *Societies and Languages of the Ancient Near East: Studies in Honour of I. M. Diakonoff* [Warminster, 1982], p. 207, incipit no. 5: ^dUtu-gin₇ è-em-ta) and D. D. Luckenbill, “A Neo-Babylonian Catalogue of Hymns,” *AJSL* 26 (1909/10), p. 28 1. 8. It is listed as “meant for recitation” in the cultic calendars TCL 6, 48:obv. 19 and Maul, “Frühjahrsfeierlichkeiten,” p. 403, I. 10', as well as in the ritual, *RAcc*, p. 40, ll. 6–7. Probably, the ritual eršemma with the same incipit (see IV R² 53 +:col. iii 16) is alluded to in *RAcc*, p. 34, ll. 5–6 rather than the balag ^dUtu-gin₇ è-ta. It remains uncertain whether the balag ^dUtu-gin₇ è-ta-na cited in the cultic calendar in Maul, “Frühjahrsfeierlichkeiten,” p. 406, I. 33' is identical with the balag ^dUtu-gin₇ è-ta. Compare

also the noncanonical balag ^dUtu-gin₇ è-ta listed in IV R² 53 +:col. i 36. Furthermore, an eršahunga named ^dUtu-gin₇ è-ta also existed in addition to the balag and the eršemma (see Maul, "Herzberuhigungsklagen," pp. 82–89).

2. Cf. IV R², Pinches, "Additions and Corrections," p. 2a to pl. 11.
3. Langdon's assumption that IV R² 11 and duplicates are the second tablet of the balag ^dUtu-gin₇ è-ta (Langdon, "Calendars of Liturgies and Prayers," p. 119 n. 1) cannot be documented.
4. See rev. 9'.
5. See SBH 54:rev. 50–53 and Hunger, *Kolophone*, p. 58 no. 149. SBH 54 was written by Bēl-iddina, the son of Marduk-bēlšunu.
6. The known evidence for the ritual use of the balag ^dUtu-gin₇ è-ta is summarized in Note 1 above.
7. See M. Civil, "Enlil the Merchant: Notes to CT 15 10," *JCS* 28 (1976), pp. 72–81.
8. For the "tablet of destiny" see A. R. George, "Sennacherib and the Tablet of Destinies," *Iraq* 48 (1986), pp. 133–46, and the Anzū myth (see edition by M. E. Vogelzang, *Bin šar dadmē: Edition and Analysis of the Akkadian Anzu Poem* (Groningen, 1988), p. 33 ll. 68–78, etc.
9. Von Weiher, *SpTU* 2, 12:col. ii 11.

3.

MMA 86.11.182

Plates 4, 5

H. 65 mm W. 69 mm Th. 25 mm

Balag: ^dUtu-gin₇ è-ta, to Enlil
S.E. 167 (= 145 B.C.), Babylon

Upper Edge

[*ina a-mat* ^{d+}*bēli(EN)*] *u* ^d*bēlī(GAŠAN)-iá liš-lim*

Left Edge Obverse

1. [.]	[dam-g]àr-ra _A ba-da-kúr [tā]m-ka-ri it-ta-kir A	U	d[ù k]a- ¹ nag-gá ¹ [al-LUD(?)] k[a-la] ma-a-tú [it-ta]- ¹ ad-lah ¹ ^{1A1}
2. ^{1E}	[úr]u-ta dam-gàr-ra ba-da-kúr	U	dù ka-nag-[gá al-LU]D(?)
3. E	[m]u-LU šir-ra šá be-lum <i>ina šir-hi-šú</i> (erasure) U(?)	A	èš Nib[rū ^{ki}]-ta bi-it {Ni-ip}-pu-ri
4. AA	še-eb é-kur-ra-ta	A	ki-ùr é- ¹ nam ¹ -ti-la ^{1A(?)1}
5. A	še-eb Zimbir ^{ki} -ta	A	ba-da-kúr U
6. AA	èš é-babbar-ra	A E	é- ^d di-kud-kalam-ma A
7. A	še-eb Tin-tir ^{ki} -ta	A	ba-da-kúr U
8. A	še-eb é-sag-fl-la	A	èš é-tür-kalam-ma ^{1A1}
9. A	še-eb Bàd-si-ab-ba ^{ki} -ta	A	ba-da-kúr U
10. AA	še-eb é-zí-da-ta	A	èš é-mah-ti-la A
11. A	še-eb é-te-me-en-an-ki	A	èš é-dàra-an-na A
12. (erasure) S ^Á	ú[r]u-ta umun-bi a-li be-el-šú	A	na-ám ba-da-kúr (read: -kud) i-ta-ra-ar-šú

13.	gašan-bi gig-gig-bi be-le[t]-su šá mar-ṣa-a-ti	A	ba-da-kúr (read: -tuš) it-ta-šab
14.	[ú]ru umun-bi : úru Mu-ul-líl-lá ālu(URU) šá ^d MIN [ša(?)] āli(URU) b]e-el-šú	A	èn li ₉ -bi-tar-ra-b[i]
15. [.]	[umun ^d Mu-ul-líl-le] [bēlu(m) ^d MIN]		ár-kát-su la ip-ru-us [líl]- ^r lá ¹ -aš ku ₄ -ra-b[i(?)] [ana za-qí]- ^r qí ¹ [. . .]
16.	[mu-LU ér-ra-ke ₄]		[ér mu-un-še ₈ -še ₈]

Left Edge Reverse

1'. [.]	[ki na-ám kud-ra-zu] [e-ma ta-at-mu-ú]		[ba-e-dè-til] [tag]- ^r da-mar ¹
2'. [.]	[sipa nu-gurum-ma] [re-é-i] ^r la ka-šá(?)-tim(?) ¹		'e ¹ -zé _U i-ni-in-gub ana še-e-nu tu-uš-zi-iz
3'.	^r su ₈ ¹ -ba ù nu-ku	A	en-nu-un-gá ba-e-tuš ana ma-ṣar-tim tu-še-šíb
4'.	a-a ^d Mu-ul-líl-lá úru-zu _U -a a-bi ^d MIN āl(URU)-ka hi-i-iṭ-ma tup-pi da-mi-iq-ti-šú šu-ṭur		è-ì _A dub-sa ₆ -ga-na ba-an-DU

5'.	x x [. . .] x x ^r si(?) ¹ E		u ₄ -ul-la úru ^{ru} -mu ^U
	[.] x x ^r ma(?) ¹ -lu-ú		šá-qu-ú na-ak-lum
6'.	[nis-ḥi . . . ^d Utu-gin ₇] ^r è ¹ -ta NU AL.TIL ana zamāri(DU ₁₂) nashī(ZI) ^{hi}		
7'.	[IM.GÍD.DA] ^{Id} AMAR.UTU-EN-šú-nu		
8'.	[.] ina qātēšu iš]-tur-ma E ^{ki}		
9'.	[i ^{ti} x (x) UD.X.KAM* MU I ME 60(DIŠ+š]u) 7.KAM* ¹ Di-mit-ri LUGAL		
10'.	[pa-liḥ ^d . . . ina šur]-qa lā(NU) itabbal(GIŠ)-šú		

Right Edge

a ḥi a TUR x [. . .
x (x) LI x [. . .
^ A še-eb é-nam-t[i-la . . .
é-hur-sag-k[alam-ma . . .

Translation

Upper Edge: Epigraph

[At the command of the Lord] and My Lady may (what I am doing) be successful.

Obverse

1. The merchant moved away; the whole land is in confusion.
Akk.: The merchant has become alienated; the whole land has been thrown into confusion.

2. From the [city] the merchant moved away; the whole land is in confusion.
3. O mourner, from the sanctuary (of) Nippur,
Akk.: As for the lord, in his dirge (he has become alienated from) the house of [Nipp]ur.
4. from the brickwork of Ekur, from the Ki⁷ur, the Enamtila,
5. (and) the brickwork of Sippar he moved away (the whole land is in confusion).
6. From the sanctuary Ebabbar, the Edikudkalamma,
7. (and) the brickwork of Tintir (Babylon) he moved away (the whole land is in confusion).
8. From the brickwork of Esagil, the sanctuary Eturkalamma,
9. (and) the brickwork of Badsiabba (Borsippa) he moved away (the whole land is in confusion).
10. From the brickwork of Ezida, (from) the sanctuary Emahtila,
11. the brickwork of Etemenanki, the sanctuary Edara⁷anna (he moved away; the whole land is in confusion).
12. From the city its lord has cut off(!) the (good) destiny.
Akk.: Its lord has cursed the city.
13. Its lady sat down(!) in great distress.
14. This city about which its lord [var.: Enlil] did not care (anymore),
Akk.: (As for) the city of (the god) *ditto* (= Enlil)
[about the city], its lord did not care (anymore).
15. (and) which the lord Enlil turned into (a place inhabited by) ghosts,
Akk.: [The lord (the god) *ditto* (= Enlil) turned it into (a place inhabited by) gho]sts.
16. [The mourner bewails with tears.]
(rest of obverse broken)

Reverse

- 1'. [You have annihilated your place from which the (good) destiny has been cut off.]
Akk.: [Whatever you swore against, you] have annihilated.
- 2'. (Once?) you had placed a shepherd who is not submissive over the sheep.
Akk.: You had placed over the sheep a shepherd who is not submissive.
- 3'. (Once?) you had placed on watch for me a shepherd who never slept.
- 4'. Father Enlil, take care of your city (And then) you will(?) write(?) a tablet (with) its favorable (destiny)!
Akk. : Father *ditto* (= Enlil), take care of your city and write then a tablet (with) its favorable (destiny)
- 5'. ... [...]. , eternal, my(?) . . .
Akk.: [.] the lofty and artistic [.] . . .
- 6'. [xth *nishu* (of the balag composition) ^dUtu-gin₇] è-ta. Not complete. Copied for singing.
- 7'. [Long tablet] of Marduk-bēlšunu.
- 8'. [. has wri]tten (the tablet) [with his hand]. Babylon,
- 9'. [month . . . , day . . . in the year 16]7 (when) Demetrius was king.
- 10'. May [the worshipper of (god) . . .] not remove it [by the]ft.

Right Edge

(not translated; see Notes below)

Notes

Obverse

- 1: The not entirely certain restoration al-LUD (instead of the expected al-lù as in the duplicate IV R² 11:obv. 1 and 3) is based on the preserved traces in the next line.
- 3: For mu-LU Šir-ra cf. Krecher, *Kultlyrik*, p. 117.
- 4: Ekur, including (é)-ki-ùr, and Enamtila are the temples of Enlil (and Ninlil) at Nippur.
- 6: Ebabbar is the temple of Utu/Šamaš at Sippar (see l. 5).
- 6 ff.: The temples Edikudkalamma, Utu/Šamaš, Esagil (the principal temple of Marduk; see l. 8); and Eturkalamma (of Bēlēt-Bābili) are located in Babylon (Tintir). The ziggurat Etemenanki belonging to the Marduk temple is not mentioned until l. 11.
- 10: The shrines of Nabû at Borsippa are mentioned in this line (see l. 9).
- 12: na-ám ba-da-kúr is an error for na-ám ba-da-kud (correct in the duplicate: IV R² 11:obv. 13). The interchange of kúr for kud is not necessarily an error of “hearing.” In l. 13 we have ba-da-kúr instead of the expected ba-da-tuš (correct in IV R² 11:obv. 15); probably the scribe in error repeated the verbal form of the refrain. The error in this line is probably of the same type.
- 14: With this line compare also the duplicate IV R² 11:obv. 17–18 (A) and K 7083 (B):
- | | | |
|---|---------------------------|-------------------------|
| A | úru-umun-e | èn li-bí-in-tar-ra-bi |
| B | úru-umun-e-bi LI(-)bí-in: | èn li-bí-in-tar-[ra-bi] |
| A | [ālu] šá be-el-šú | ar-kàt-su la ip-ru-us |

Reverse

- 5': The catch-line leading to the following *nishu* of the balag ^dUtu-gin₇ è-ta is also known from the duplicate IV R² 11:rev. 52' ([. . .]x u₄-ul-la u₁₈-ru-mu), but the duplicate does not have an Akkadian interlinear translation. For u₁₈-ru see M.-C. Ludwig, *Untersuchungen zu den Hymnen des Išme-Dagan von Isin*, Santag 2 (Wiesbaden, 1990), pp. 107–13. No known tablet contains the *nishu* cited in the catch-line here.
- 9': MMA 86.11.182 is the first known literary text with a date from the reign of the last Seleucid ruler of Babylon, Demetrius II (145–141 B.C.). MMA 86.11.182 can now be added to the list of texts with a date from the reign of Demetrius II (hitherto, only astronomical texts) in Oelsner, “Randbemerkungen zur arsakidischen Geschichte,” p. 26 n. 5.
- 10': For the restoration see CAD Š/3, p. 354b s.v. *šurqu* (courtesy of W. G. Lambert). Comparison of the expression *ina sartu lā Giš-(šú)* (see Hunger, *Kolophone* 124:6; 125:4; 127:3, etc.) with BM 33851: left column 4' *ina s]ar-tú la i-tab-bal* (Lambert, *BWL*, pl. 29) indicates that the logogram Giš here should be read *tabālu*, “take away” (courtesy of W. G. Lambert).

Right Edge

It is not clear exactly where the lines added by the scribe on the edge of the tablet should be inserted. The sign transliterated as *hi* is possibly NU or U written over an incompletely erased sign.

No. 4

Balag: nir-gál lú è-NE, to Ninurta

Introduction

This tablet is composed of two fragments joined by K. Volk, MMA 86.11.349 + MMA 86.11.365. It is particularly important, as it contains large parts of the balag nir-gál lú è-NE addressed to Ninurta¹ and thus gives us a better idea of the characteristics and length of that text. With the help of this tablet we can now reconstruct the greater part of the balag. The previously known parts of the text were edited by M. E. Cohen in *CLAM* 2, pp. 468–78.² MMA 86.11.349+ contains the second *nishu* of the balag to be followed by only one additional tablet, with the concluding eršemma. The balag itself (without the eršemma) is written on just two tablets in this edition, while the version of the balag known from Uruk was written on four tablets. The first line of MMA 86.11.349+ is identical with the catch-line on the tablet AO 6496 (TCL 6, 57 = TCL 16, 42).³ The latter tablet in turn is designated as the second *nishu* of the balag nir-gál lú è-NE in the colophon. Unfortunately, only about half of MMA 86.11.349+ is preserved. The missing part of the tablet, however, can be restored partly from the fragments K 4970 (IV R² 27, 4 and Pinches, “Additions and Corrections,” p. 6) and K 3361 (Macmillan, *Religion of Babylonia and Assyria*, BA 5, p. 680 no. 33).

The balag nir-gál lú è-NE could be combined with any of three different eršemmas. In the catalogue IV R² 53+:cols. i–ii 31 it is combined with the eršemma umun úru-mu in-di-bi mah-a. During the spring festival in Ashur⁴ and in a ritual for the king⁵ (to calm the wrath of the gods) it was sung together with the eršemma ur-sag ^dUtu-u₁₈-lu, which is preserved on text No. 14 (see below p. 94). In the version from Babylon treated here, as well as on a tablet found at Nineveh,⁶ the eršemma addressed to the mother goddess Bēlet-ilī, šubur-mèn šubur-mèn, forms the conclusion to the balag composition.

Unlike many other balag compositions the balag nir-gál lú è-NE is not a lamentation but a hymn of praise, celebrating the heroic deeds of Ninurta. The *nishu* edited here contains four sections. The first section (obv. 1–19) tells of the heroic deeds of Ninurta, also recorded in the myth Lugal-e, in which he destroyed the mountain (kur). The second section, which is long and only partially preserved (obv. 20–rev. 7'), describes Ninurta’s “promotion” brought about by the gods for whom he was performing his heroic deeds, and this is also known from the myth Lugal-e. The following section (rev. 8'–22') is very poorly preserved. It ends with a cry of triumph describing how the enemies conquered by Ninurta now have to hide from him and his power in the “crevices of the earth.” The last section (rev. 23'–33') consists of a litany in which numerous gods and in the last line “(all) the gods of heaven and earth” are called upon to soothe the wrath of Ninurta, which might otherwise be turned against humans (see rev. 23').

The colophon states that the present tablet was written by Bēl-apla-iddin, the son of Ea-balāssu-iqbi (from the Nanna-ù-tu family). Since there was not enough room on the reverse of the tablet, Bēl-apla-iddin wrote the colophon on the left edge, and probably because of the restricted space here he did not give a full ancestry or a date. Thus we can only assign an approximate date for the writing of the tablet. Surviving tablets from the library of the Nanna-ù-tu family written by Bēl-apla-iddin almost all date from between the years 129 B.C. and 113 B.C. When Bēl-apla-iddin took charge of the library after his father’s presumed death, he probably no longer wrote tablets himself, although *SBH* 46 was written by him in 91 B.C.

1. nir-gál lú è-NE is transliterated instead of nir-gál lú è-dè, since several of the texts have the variant è-NI; see KAR 305:rev. col. ii 3; *SBH* 7:rev. 4; and TCL 6, 57 (= TCL 16, 42):rev. 16. For the variation between ni and NE(dè) see Cohen, *Eršemma*, p. 56, ll. 40–41 with commentary pp. 153–54 (see Cooper, *Angim*, pp. 184, 153 and also Maul, “Herzberuhigungsklagen,” p. 88).

2. Cf. Black, "Sumerian *Balag* Compositions," p. 47, no. 28, and Borger, "Schlüssel zu M. E. Cohen, *CLAM*," pp. 30–31. Contrary to Cohen, *CLAM* 2, p. 468, his copy B (K 4956 + 5224 = Langdon, *BL* 9a) does not belong to the *balag nir-gál lú è-NE*, although this tablet has an eršemma of the same title. There exists further a Sumerian šuilla addressed to Ninurta that also begins with the line *nir-gál lú è-NE* (MMA 86.11.298); see below text No. 15. M. E. Cohen's copy G (Sm 355 = Langdon, *BL* 33), for which this writer has identified a duplicate, Sm 1099, also does not belong to the *balag nir-gál lú è-NE*.
3. The obv. of AO 6496 parallels Langdon, *BL* 73:rev. 14–27 (on the tablet: 15–28), while the rev. of AO 6496 parallels Langdon, *BL* 73:rev. 31–47 (on the tablet: 32–48). The unpublished K 16821 (see Black, "Sumerian *Balag* Compositions," p. 47) is an additional duplicate of Langdon, *BL* 73:rev. 24–29.
4. Maul, "Frühjahrsfeierlichkeiten," p. 402, l. 4'.
5. See Maul, "Herzberuhigungsklagen," pp. 53–56 (K 5260+).
6. Compare the Note to rev. 36' below.

4.

MMA 86.11.349 + MMA 86.11.365

Plates 6, 7

H. 145 mm W. 75 mm Th. 32 mm

Balag: *nir-gál lú è-NE*, to Ninurta
Seleucid or Arsacid period (Babylon)

Upper Edge

ina a-mat ^d+bēli(EN) u ^dbēlti(^fGAŠAN¹)-^fia¹ liš-l[im]

Obverse

1.	ur-sag gal-e kur mu- ¹ un ¹ -g[ul]-gul-me-en umun-bi-ra umun-bi-ra(?) á i-(x x)]-x qar-ra-du ra-bu-ú mu-a[b-b]it šá- ^f di ¹ -i ^f be(?) ¹ -li(?) ¹ ana(?) ^f be(?) ¹ -[e]l(?) [.] x-na- ^f AD(?) ¹	
2.	a ù-li-li-lam-ma a-na ša-di-i šá ri-šá-a-tim	a ù-li- ^f li-lam ¹ -[ma] a-na ša-di-i šá ^f ri ¹ -šá-a-tim
3.	úru gu ₄ -da āl(ān)ū(URU) ^{meš} ki-ma le-e	àm-du ₇ -du ₇ it-tak-ki-pu-šú
4.	šu-mah an-na-mu e-mu-qan ši-ra-a-ti šá ^d A-nim	kur mu-un-gul-gul mu-ab-bit šá-di-i
5–6.	umun ^f ur ¹ -sag gal-e	umun-si ^d Mu-ul-líl-lá kur
7–8.	umun [^d Ur]š-a-ra	umun é-ninnu kur
9–10.	[ibila] ^f é ¹ -šár-ra	umun é-šu-me-ša ₄ ^f kur ¹
11–12.	[ur-sag ^d]Za-ba ₄ -ba ₄	umun é-dub-b[a kur]
13–14.	[umun é-me-te-u]r-sag	umun é-miš-lam [kur]
15–16.	[umun é-i-b]í- ^d A-nu-um	umun ^d Di-kud-mah-a [kur]
17–18.	[umun é-ra]b-ri-ri	an-gin ₇ rib-ba-mu [kur]
19.	ki-[g]lin ₇ sīg-ga-mu	
20.	en su-lim-ma šá be-lum šá-lum-mat-su	su zi-zi-[bi(?)] zu-um-ri ú-š[a-aḥ-ha-aḥ]

21. kur-gal ^dMu-ul-líl-lá-ra
šá-du-ú ra-bu-ú ^dMIN
usu ù-m[u- . . .]
e-m[u-q . . .]
22. [nu-n]us <zi> 'galga'-sù é-kur-ra
'sin-niš'-tum kit-tum šá mì-lik-šá
bí-i[n- . . .]
ru'-ú-[qu ina É-kur. . .]
23. ama-gal ^dNin-líl-lá-ra
usu [. . .]
24. nu-nus zi é-sù-ga
sin-niš'-tum kit-tum ina É-sù-ga
zí x (x) [. . .]
ú-t[a-ad-da-šú]
25. nin₍₉₎-gal ^dMu-ul-líl-lá-ra
usu [. . .]
26. su-zi me-lám gür-ru u₄-al-tar
ní-ḥu[š ri-a-bi]
šá pu-luh-ti me-lam na-šú-ú u₄-mu da-pi-nu šá ra-š[ub-ba-tú ramû]
27. umun ^dŠul-pa-è-a-ra
usu [. . .]
28. nam-tar lú gu-la
ní-ḥuš [ri-a-bi]
nam-ta-ru ra-bu-ú
šá ra-šub-[ba-tú ramû]
29. mu-LU-lil ama 'ugu-na'
'usu' [. . .]
30. sa šu-u[š-gal]
[ki-bal-a-šú-šú]
31. [umun ur-sag gal-e]
[usu . . .]
(rest of obverse broken)

Reverse

- (beginning of reverse broken)
- 1'. 'alim(?)-ma(?) ur(?)¹-s[ag(?) gal-e]
[usu . . .]
- 2'. u₅ s[a]₆-'ga¹
šá šam-ni ta-a-bi
K[i-nú-ur₅-šá-ba(?)]
šá 'šu¹-[ma]
- 3'. umun šu-luh-ha an-na-ra
usu ma[h . . .]
- 4'. ú gu₇ ga gu₇(?) (read: nag?)-e ^A
a-kil šam-ni ši-iz-bi
Ki-nú-'ur₅-šá¹-[ba]
šá šu-¹ma¹
- 5'. Dumu-zi-abzu-ra
[us]u x (x) [. . .]
- 6'. [g]u₄(?) [x(?) s]a₄-da
[. . .] x [. . .]
- 7'. kù gašan 'é(?)¹-[.]-ra
[usu . . .]
-
- 8'. e₁₁(?) x [.] x-¹ra¹
'ki(?)¹ [. . .]
- 9'. x (x) x [.]
[.] x x [. . .]
- 10'. [.]
[. . .] x mu [. . .]
- 11'-12'. [.] x (x) :
[umun] 'é(?)¹-[. . .]
- 13'-14'. 'umun(?)¹ [x (x)] x x kù-¹ga¹/bi x x x : (?)
umun [^{din}gi¹]Di-kud-ma[h]-¹a¹ [. . .]
- 15'. a ù-li-li-lam-ma
a ù-li-[i-lam-ma]
- 16'. úru gu₄-da
àm-du₇-d[u₇]
- 17'. ki érim-ma
šege₁₁ mu-un-gi₄-[gi₄]
- 18'. ur-sag gal ki érim-ma
šege₁₁
- 19'. x KU é-a-šè
é ki-bal-a-šè
- 20'. u[r-s]ag gal ki-bal-a-šè
šege₁₁
- 21'. k[i-i]n-dar kur-ra
mu-un-na-an-dúr-ru-ne-eš

22'.	\wedge al-[l]i-li-lu al-li-la-lu	é-a-šè
23'.	an d[è-è]m-mà-hun-e $\ddot{s}am\dot{u}$ (AN) ^{u'} li-ni-i \ddot{h} -hu-ka	ki dè-èm-mà-sed-[dè] ersetim(KI) ^{tum} li-šap-ši-i[h]-k[a]
24'.	alim-ma	umun ur-sag gal
25'.	u[r]-sag gal	umun-si ^d Mu-ul-líl-lá
26'.	alim-ma	umun ^d Uraš-a-ra
27'.	ur-sag gal	umun é-šu-me-ša ₄
28'.	alim-ma	umun ^d Di-kud-mah-a
29'.	ur-sag-gal	(erasure) umun é-ra[b]-ri-ri
30'.	umun úru mah-A x be-lum $\ddot{a}li$ (URU) [ṣ]i-ri	x x [. . . ^d Mu-ul-líl]-lá [. . .]-ú rabú(GAL) ^{u'} ^d MIN
31'.	égi(-)-ru-ma (erasure) ru-ba-tú $\ddot{a}li$ (URU) u bīti(É)	a[ma-gal ^d Nin-líl]-lá {u m}-{m}u rabītum(GAL) ^{tum} ^d MIN
32'.	^d 40 MU ^{meš} GU ₄ .UD ^{meš} ¹ A ¹ -[ru-ru nin ₍₉₎] ^d Mu-ul-líl-lá-r]a	
33'.	dīm-me-er-an-na	[dīm-me-er ki]-a
34'.	šūd-dè še-eb é-šu-me- ¹ ša ₄ ¹	[ki dè-en-gi ₄]-gi ₄

Under Edge

35'.	ki-šu-bi (erasure) -im [.]	[b]a[la]g [^d Nin-ur]ta-ke ₄
36'.	šubur-mèn šubur-mèn [kur-kur(?)ra kal-ga-mèn] ar-da-tum ana-ku a{r-da-tum ana-ku ina mātim . . . -āku]	

Left Edge

1. nis- $\ddot{h}i$ MIN-ú nir-g[á]l [l]ú è-NI NU.AL.TIL
2. ana zamāri(DU₁₂) nashi(zí)^{bij} IM.GÍD.DA(?) ^{ld}Bēl(E)N)-apla(¹A¹)-iddin(MU) māru(A) šá
^{ld}Ea(IDIM)-balāt(TIN)-su-iqbi(E) [. . .]

Translation

Upper Edge: Epigraph

At the command of the Lord and My Lady may (what I am doing) be success[ful].

Obverse

1. [You], the great warrior, who has des[troyed] the mountains; [for its lord, for its lord you have . . . ed your strength (?)!]
Akk.: Great warrior, who destroys the mountains, My(?) Lord, to the lord [of(?)]

2. O *ulili* . . . , O *ulili* . . . !
 Akk.: Against the mountain of rejoicing, against the mountain of rejoicing,
3. the flood gored like an ox.
 Akk.: The cities gored like a bull.
4. My lofty hand of heaven /of An has destroyed the mountains.
 Akk.: The lofty strength of Anu, the one who destroys the mountains.
5. The lord, the great warrior (has destroyed) the mountains.
6. The city ruler of Enlil (has destroyed) the mountains.
7. The lord Uraš (has destroyed) the mountains.
8. The lord of Eninnu (has destroyed) the mountains.
9. [The heir] of Ešarra (has destroyed) the mountains.
10. The lord of Ešumeša (has destroyed) the mountains.
11. [The warrior] Zababa (has destroyed) the mountains.
12. The lord of Edub[a (has destroyed) the mountains].
13. [The lord of Emete'u]rsag (has destroyed) the mountains.
14. The lord of Emišlam [(has destroyed) the mountains].
15. [The lord of E-ibbi-Anum [(has destroyed) the mountains].
16. The lord Dikudmaha [(has destroyed) the mountains].
17. [The lord of Era]briri (has destroyed) the mountains.
18. My (god), the one who is as surpassing as heaven, [(has destroyed) the mountains].
19. My (god), the one who is as fixed as the earth, (has destroyed) the mountains.
20. When the lord of awe-inspiring radiance who makes the bodies waste away
 Akk.: The awe-inspiring radiance of the lord makes the bodies w[aste away].
21. had [...]ed the strength for the great mountain Enlil,
 Akk.: The great mountain Enlil [.] stre[nght].
22. the faithful woman, the one with farsighted understanding [. . . ed him] in the Ekur.
23. (When he had . . . ed) the strength for the great mother Ninlil,
24. the faithful woman [made him] faithfully [known] in Esuga.
 Akk.: The faithful woman made [him known] in Esuga.
25. (When he had . . . ed) the strength for the elder sister of Enlil,
26. (when) the one who bears awe-inspiring splendor, U'altar (the planet Jupiter), the one who [is covered with
 aw]ful terror,
 Akk.: The one who bears awe-inspiring splendor, the overwhelming day(light), the one who [is covered
 with (awful) ter]ror,
27. (had . . . ed) the strength for the lord Šulpa'ea,
28. (when) Namtar, the very great one, [the one who is covered with] awful terror,
29. (had . . . ed) the strength for the *Lillu*-demon of the mother who bore him,
30. (when) the [big] battle net [that spreads over the hostile country],
31. [the lord, the great warrior, had . . . ed the strength]
 (rest of obverse broken)

Reverse

- 1'. (When) the important one, the [great warrior (had . . . ed the strength)],
 - 2'. (when he had . . . ed) the lofty strength for the one of the good oil, the one of K[inurša(b)/Kinirša(?)],
 - 3'. for the lord of the hand-washing rite of heaven/An,
 - 4'. (when) the one who eats food and drinks(?) milk (had . . . ed) the . . . strength for the one of Kinurša(b)/Kinirša,
Akk.: The one who consumes oil and milk, the one of *ditto*
 - 5'. for (the goddess) Dumuzi'abzu,
 - 6'. (when) the . . . (had . . . ed) the . . . strength
 - 7'. for the holy one, the lady of E[. . .](?),
-
- 8'-11'. (too damaged for translation)
 - 12'. [the lord of] E[. . .] (?),
 - 13'. the lord of [Eme]te'ursag(?) . . . ,
 - 14'. the lord Dikudmaḥa [(. . .)],
 - 15'. O *ulili* . . . , O *ulil[li]* . . . ,
 - 16'. the flood gored like an ox.
 - 17'. He roared wherever the enemy was.
 - 18'. The great warrior roared wherever the enemy was.
 - 19'. Against the . . . of the house, against the house of the hostile land (he roared wherever the enemy was).
 - 20'. The great warrior roared against the hostile land.
 - 21'. On his account they dwell (now) in the crevices of the earth,
 - 22'. to the *allililu* and the *allilalu* of the house!
-
- 23'. May heaven quiet you; may the earth appease you!
-
- 24'. (O) important one, lord, great warrior,
 - 25'. great warrior, city ruler of Enlil,
 - 26'. important one, lord Uraš,
 - 27'. great warrior, lord of Ešumeša,
 - 28'. important one, lord Dikudmaḥa,
 - 29'. great warrior, lord of Erabrirī,
 - 30'. lord of the lofty city, great of Enlil,
 - 31'. princess of the city and of the house, great mother Ninlil,
 - 32'. A[ruru, sister of Enlil],
(forty lines skipped)
 - 33'. the gods of heaven, [the gods] of [the netherworld].
-
- 34'. {May} the supplication [resto]re the brickwork of Ešumeša.
-

Under Edge

35'. It is its end. A balag of [Ninur]ta.

36'. I am the servant girl, I [am] the servant girl; [in the lands(?) I am strong].

Left Edge

1. Second *nishū* (of the balag composition) *nir-gál lú è-NI*; not complete.
2. Copied for singing. [(Long?) tablet of Bē]l-apla-iddin, the son of Ea-balāssu-iqbi.

Notes

Obverse

- 1: The first line of the second *nishū* of the *nir-gál lú è-NE* balag, according to the division into tablets in the Nanna-ù-tu family library, was already known from the catch-line of tablet AO 6496 (TCL 6, 57 = TCL 16, 42). The restoration of obv. 1 is taken from TCL 16, 42:rev. 15. (Note that the copy published in TCL 6, pl. 54 rev. 15, differs somewhat from the traces given in TCL 16, 42.) This Uruk tablet belongs to an edition of balags in which the subdivision into *nishū* deviates from the Babylonian tradition. AO 6496 is also designated as the second *nishū* of the balag in the colophon. However, the first and second *nishū* of the *nir-gál lú è-NE* balag in the edition known from Uruk correspond to the first *nishū* of the balag in the edition to which MMA 86.11.349+ belongs.

In the second part of the line one would expect: “you have used (your) strength.” If this restoration is correct, we have a summary of the entire content of the second *nishū* in the first line of the text. The first half of the line corresponds to the litany obv. 1–19, while the second part of the line should correspond to the following long litany, only partially preserved in MMA 86.11.349+ (obv. 20–rev. 7').

- 2: See the parallels rev. 15' and Langdon, *BL* 22 = 202:6'. ù-li-li is a strong emotional exclamation. The word e-la-lu (cf. e-lá-lù in text No. 10 obv. 3'-4') is ultimately identical with ù-li-li. It is often rendered in the Akkadian translation as *lallarātu*, “laments” (compare e.g., *SBH* 19:rev. 28–29; *SBH* 46:obv. 1–2, rev. 30–31, etc.). But ù-li-li can also be a cry of joy, and as in our text as well as in *SBH* 53:rev. 36–37, it is then translated in Akkadian *rišātu*, “jubilation.” ù-li-li/e-la-lu is probably identical with the exclamation *alālu* and the variants *alāla*, *alāli*, *alili*, known from Akkadian texts (see *AHw*, p. 34 s.v. *alālu* I, *alālu* III; *CAD* A/1, pp. 328–29 s.v. *alāla*; pp. 331–32 s.v. **alālu* B and Notes on the present text, rev. 22'). Other variants of this exclamation are el-lu, which can be translated as *lallarātu* as well as *rišātu*, also further al-li-li-lu, al-li-la-lu (see Note to rev. 22'). Perhaps i-lu = *qubû*, *nubû*, “lamentation” (often used in Emesal texts) is also related to ù-li-li/e-la-lu, etc. Krecher, *Kultlyrik*, pp. 148–50 and n. 433, has collected further variants of this interjection.
- 3: Compare the parallels rev. 16' and Langdon, *BL* 22 = 202:7'. The Sumerian úru should not be translated “city” but “flood” (*abûbu*); in the Akkadian the equation úru = *abûbu* with variants for úru: a-ma-ru, a-má-ru, a-má-uru₅, and mar-uru₅ is well attested in Emesal texts (see, e.g., *SBH* 34:obv. 7–8 and J. S. Cooper, “Warrior, Devastating Deluge, Destroyer of Hostile Lands: A Sumerian Šuila to Marduk,” in Leichty et al., *A Scientific Humanist*, p. 86, l. 1). The Akkadian translation may allude to l. 696 of Lugal-e (see van Dijk, *Lugale* 2, p. 176).
- 4: For Ninurta’s title, šu-mah, cf. Cooper, *Angim*, p. 86, l. 162, and pp. 133–34.

- 16: As in the parallel rev. 28', ^dDi-kud-mah-a and not ^dDi-kud-mah-à[m] is no doubt to be read.
- 18–19: The Akkadian translation of these two lines is known from IV R² 30:1, 3 and 5: ša kīma šamē šūtuqu; ša kīma eršetim retû (J. Böllenrücher, *Gebete und Hymnen an Nergal* [Leipzig, 1904], p. 43 no. 7, II 3, 5 = Cohen, *CLAM* 2, p. 459, ll. 31–32).
- 20: bi is restored from ll. 26 and 28. For the equivalence zi-(zi) = šahāhu cf. R. Borger, “Das dritte ‘Haus’ der Serie *bit rimki* (V R 50–51, Schollmeyer *HGS*, nr. 1),” *JCS* 21 (1967) p. 4, no. 26, and idem, “Weiteres Material zu V R 50–51 (*JCS* 21, S.1–17),” *ZA* 61 (1971), p. 85; also CT 17, 25:19–20 (see in addition *CAD* Š/1, p. 75 s.v. šahāhu). For the Ninurta epithet en su-lim-ma see Angim l. 21 (Cooper, *Angim*, p. 60).
- 21: Unfortunately the verb is not preserved. We can assume, however, that here as in the refrain of the following long litany (up to rev. 7') we are told that Ninurta used his power for the deities named here. Ninurta, acting for the other gods, waged his battle against the á-ság in the Ninurta myth Lugal-e. The other gods submitted to him after his success, and through Enlil they gave him the “power of Heaven” (usu an-na) (see van Dijk, *Lugale* 2, p. 177, l. 700). In the litany beginning with l. 20, of which large parts are missing on this tablet, we learn that Ninurta used his power (usu) on behalf of the gods of Nippur (cf. ll. 21ff.) as well as the deities of Girsu and Lagaš (cf. IV R², Pinches, “Additions and Corrections,” p. 6 to IV R² 27 no. 4 and the duplicate: Macmillan, *Religion of Babylonia and Assyria*, BA 5, p. 680, no. 33) and their environs (see rev. 2'–4'), after which they exalted him in gratitude (cf. ll. 22 and 24). The central theme of the second *nishu* and of the whole balag composition, namely that Ninurta used and gave his power on behalf of the welfare of man and gods (see in this connection also Maul, “Wenn der Held,” pp. 326–31), is skillfully summarized in the first half-line of the text nir-gál lú è-NE, which was used as the title of the complete balag.
- 22: zi, equating the Akkadian *kittum*, has inadvertently been omitted by the scribe from the Sumerian line (cf. l. 24).
- 24: The second zi has no equivalent in the Akkadian. It could well have been translated as *kīniš*. K 4980 (IV R² 27 no. 4, Pinches, “Additions and Corrections,” p. 6) col. i 1'–16' duplicates the present text obv. 24–30. The Akkadian version of the line has been restored from K 4980:col. i 3' (IV R² 27 no. 4, Pinches, “Additions and Corrections,” p. 6 bottom). The form *ūtaddâššu* can be understood as the perfect D-stem of *idû*.
- 25: Enlil's older sister, who is not named here, is the goddess Ninhursag. For Ninhursag and her relationship with Ninurta see van Dijk, *Lugale* 1, pp. 35–36.
- 28: lú is missing in the duplicate K 4980 (IV R² 27, no. 4) col. i 10'. For ní-huš ri-a as an epithet of Ninurta compare Angim, l. 4 (Cooper, *Angim*, p. 56).
- 29: In the duplicate K 4980 (IV R² 27 no. 4), col. i 14', this line has an Akkadian translation, which, however, is a variant of the line under comment:

13'. mu-LU-lil a-a ama ugu-na usu

14'. ^d*Lil-lum a-bu um-mu a-lit-ta-šú*

^dLil = ^d*Lillum* was taken as the son of the previously mentioned Šulpa'ea (obv. 27) and the mother goddess (note ama ugu-na in obv. 29) who is already mentioned in obv. 25 (see also *CAD* L, p. 190 s.v. *lilū*). Note that mu-lu-lil is Emesal for ^dLú-làl, so K 4980 is in error (see W. G. Lambert, “Lulal/Lātarāk,” *RLA* 7 [1987–90], p. 163, and Lambert's corrections to misprints in that article in “Misprints!” *NABU* [1995], p. 92; reference courtesy of W. G. Lambert).

30: The Akkadian translation of the line is preserved on K 4980 (IV R² 27, no. 4) col. i 16':

- 15'. sa šu-uš-gal ki-bal-a šú-šú
 16'. ŠU-ma *sa-ḥi-ip māt(KUR) nu-kúr-tim*

For Ninurta's weapon, sa šu-uš-gal, see also Angim, l. 137 (Cooper, *Angim*, pp. 80 and 125) as well as Lugal-e, l. 13 (van Dijk, *Lugale* l. p. 30). Four further (double) lines are preserved on the duplicate K 4980 (IV R² 27, no. 4) col. i 17'-21'. After a big gap ll. 1'-17' of K 3361 (Macmillan, *Religion of Babylonia and Assyria*, BA 5, no. 33) can be inserted between MMA 86.11.349+:obv. 30 and rev. 1'. K 4980 (IV R² 27, no. 4) col. ii 1'-18' is a duplicate of K 3361:6'-17'. The text is continued on K 4980:19'-21' and then breaks off.

Reverse

- 1': This line has an exact parallel in IV R² 27, no. 4, l. 60, which follows MMA 86.11.349+:obv. 30: umun ur-sag gal-e usu.
- 2': u₅ is the Emesal form for i = šamnu (see MSL 4, pp. 23–24, 175–78 [Emesal Vocabulary]). For the uncertain restoration of the second half of the line see rev. 4'. If this restoration is correct, then presumably umun šu-luh-ha an-na is the consort of Dumuziabzu mentioned in l. 5'.
- 3': usu-mah = emūqān śirāti is the power of Ninurta also mentioned in An-gim dím-ma (Cooper, *Angim*, pp. 86, 162); usu mah is also an epithet for Ninurta.
- 4': The first half of the line no doubt contains an epithet for Ninurta, but the meaning is not clear. Perhaps it stresses his characteristic as a god of agriculture. The Akkadian version would have had ākilat if it had been an epithet for Dumuziabzu. The ergative postposition -e shows that line 4'a refers to Ninurta. It is certainly a scribal error that the Akkadian line has šamnu, "oil," as an interpretation for ú. Obviously this error is influenced by l. 2, where the Emesal form for i, i.e., u₅, was translated correctly as šamnu. The combination of ú and gu₇ (= ak(a)lu + akālu) is so common that the error cannot be blamed on the Sumerian line. Kinurša(b) together with Ki-nir-ša/Ša-ba-(k) (see P. Michalowski, *The Lamentation over the Destruction of Sumer and Ur* [Winona Lake, 1989], p. 138, ll. 178–79) is the Emesal form for Kinirša/Kinunir. The Emesal writing Ki-nú-ur₅-ša-ba is already known from SBH 66:rev. 35 and Langdon, BL 175 (K 3001), rev. 3'. Kinunir/Kinirša was the cultic center of the goddess Dumuziabzu, located in the region of the state of Lagaš. For this location see D. O. Edzard, "Kinunir, Kinirša," RLA 5 (1976–80), pp. 603–4, and A. Falkenstein, *Die Inschriften Gudeas von Lagaš* 1, AnOr 30 (Rome, 1966), pp. 32–33.
- 5': For the goddess Dumuziabzu see ibid., p. 67; idem, CRRA 3 (Leiden, 1954), pp. 45–47; and D. O. Edzard in H. W. Haussig, ed., *Götter und Mythen im Vorderen Orient*, Wörterbuch der Mythologie 1 (Stuttgart, 1965), pp. 53–54.
- 8'-13': The surface of the tablet is almost completely destroyed.
- 15'-16': Compare the parallels obv. 2–3 with Langdon, BL 22 = 202:6'-7'.
- 17': See the parallel in Langdon, BL 22 = 202:8'.
- 21': Just as the enemies subdued by Ninurta hid in the crevices of the earth, so do the demons hide according to CT 16, 44:88–89:
- 88: ki-in-dar kur-ra-ke₄ dúru-na-a-meš
 89: *ina ni-gi-iṣ-ṣi er-še-ti it-ta-na-aš-šá-bu*

- 22': Here *allililu* and *allilalu* should be interpreted as cries of exultation, not as cries of lamentation. They are ultimately identical with the *alālu*-cry in Akkadian texts (see Note above to obv. 2), and they are used like the Hebrew *halleluyāh* (compare the Akkadian verb *alālu* with the Hebrew *hillēl*).
- 31': égi (-) ru-ma stands for égi úru ma. The contraction égi (-) ru-ma indicates, as does the Akkadian translation, that it is wrong to understand égi erim₆-ma rather than egí úru ma. The known parallels to l. 31' from the Emesal texts are listed in Maul, "Herzberuhigungsliagen," pp. 105–6.
- 32': The beginning of the litany (ll. 24'–30') is clearly tailored to Ninurta's being the addressee of this balag. The standard epithets of Ninurta are listed in ll. 24'–30', where in some cases he is identified with other gods (Uraš: l. 26'; Dikudmaḥa: l. 28'; Pabilsag: l. 29'). See Maul, "Wenn der Held," p. 320, for Ninurta's aliases in the Emesal litanies. These epithets can be found in many Emesal prayers addressed to Ninurta. The following lines, however, belong to the standard Emesal litany, in which a number of gods are invoked. These gods are supposed to calm the angry god (see l. 21') in order that the brickwork of the temple can be restored again (l. 34'). Only if the god to whom the song is addressed has regained his calm and is feeling benevolent toward mankind can there be favorable conditions for people of the city or of the entire country.

Bēl-apla-iddin, the scribe of tablet MMA 86.11.349+, added two lines of the standard Emesal litany (ll. 31'–32') after the Ninurta epithets, and then, in somewhat smaller script in the empty space in l. 32', he noted that forty lines had been skipped. Only the last line of the litany was then copied out. This convention was often followed in copying Emesal texts containing standard litanies, indicating that the litany was assumed to be well known. Bēl-apla-iddin wrote the present text expressly for the recitation / singing of the balag (see the colophon), and he knew the forty skipped lines of the litany by heart, as did probably all the other *kalū* singers at the time. Since, however, other scribes wrote out the entire litany (or very similar ones), it is possible to reconstruct most of the skipped passage of the text. The two lines of the litany written down by Bēl-apla-iddin in the present text, ll. 31'–32', can be found in Langdon, *BL* 72 (K 8473) + Craig, *ABRT* 1, 19–21 (K 2365 +2525) last column on the rev. in ll. 5–6 (wrongly indicated as obv. in Craig, *ABRT* 1, 19):

5. égi úru ma ama gal ^dNin-lil-[lá / le]
6. ^dA-ru-ru nin₍₉₎ ^dMu-ul-lil-lá-r[i!]

The next 28 lines of the litany follow in Craig's copy (*ABRT* 1, 19–20), and then the text breaks off. The tablet *SBH* I contains a litany, which largely duplicates that of Langdon, *BL* 72+ (*BL* 72+:rev. last col. 8–34 = *SBH* I:rev. 27–50) and which ends with the same line as the abbreviated litany in MMA 86.11.349+:rev. (*SBH* I:rev. 55): dīm-[me]-er an-na dīm-me-er ki-a a-ra-zu. Langdon, *BL* no. 72+:rev. last col. 34 (= *SBH* I:rev. 50) is followed in *SBH* I by only four more lines before the concluding line: dīm-me-er an-na, etc. Thus several additional lines must have existed in the litany not copied out in the present text, which are not present in the litany reconstructed from Langdon, *BL* 72+ and *SBH* I. In any case the litany of the present text should have corresponded generally to the "smaller Emesal litany" (see R. Borger, *Die Emesal-Götterlitaneien* [forthcoming]).

- 33': In this concluding line of the litany the worshipper, in a sweeping appeal, calls upon all the gods not previously named, so that the rest of the gods also will participate in calming the wrath of Ninurta.
- 34': This line forms the conclusion of numerous balags, sometimes with the name of the temple of the god to whom the balag is addressed. See the passages collected by Cohen, *CLAM* 1, pp. 29–31, and further see Krecher, *Kultlyrik*, p. 30. There is not enough space here for the conceivable ending: é-šu-me-[ša₄]-[ta].

Under Edge

- 35': One would expect ki-šú-bi-im instead of ki-šu-bi-im. In this connection see Krecher, *Kultlyrik*, p. 30, and Cohen, *CLAM* 1, pp. 29–31.
- 36': The balag nir-gál lú è-NE is combined with the eršemma umun úru-mu indi-bi mah-a in the big catalogue IV R² 53+:cols. i–ii 31. The edition of the balag nir-gál lú è-NE follows a different tradition on this tablet. The eršemma šubur-mèn šubur-mèn (Cohen, *Eršemma*, p. 15 no. 167) cited in the catch-line is not included in IV R² 53+. However, it was known at Nineveh. It was meant to be recited with the balag égi-re égi-re (also not included in IV R² 53+), to the goddess Bēlet-ilī as part of a Namburbi ritual; see R. Caplice, “Namburbi Texts in the British Museum IV,” *OrNS* 39 (1970), p. 119, l. 38. It was probably also combined with this balag in van Dijk, *Texte aus dem Rēš-Heiligtum*, 15:obv. 8, and in K 9420, 8' (see Maul, “Herzberuhigungsklagen,” pp. 45–46). The third *nishu* of the balag mu-tin nu-nus dím-ma and the third *nishu* of the balag gu₄-ud-nim (é)-kur-ra both have égi-re égi-re as the incipit. A tablet from Nineveh, K 9342 + 10861 (joined by R. Borger; for K 10861 see Black, “Sumerian Balag Compositions,” p. 47, and Cohen, *CLAM* 2, p. 469) has preserved the rest of an eršemma and the following caption:

Reverse

1. [ér-šèm-ma ^{dīn}gir] Nin-urta-kám
2. [ér-šèm-ma n]jir-gal lú è-NE

After a dividing line follows: [. . . .] -ra kal-ga-mèn. (The following four lines have the refrain šubur-mèn. It is possible that the unpublished fragment K 6438, with a passage from the eršemma šubur-mèn šubur-mèn, also belongs to this tablet.) Thus there were two eršemmas at the end of this edition of the balag composition (editions of balag compositions with two eršemmas are also known elsewhere). The first would be the eršemma umun úru-mu indi-bi mah-a; the second would be the eršemma in the edition of MMA 86.11.349+: šubur-mèn šubur-mèn. Another edition of this eršemma has been preserved in Langdon, *BL* 182 (K 8642):obv. 1'-2':

- 1'. [šubur-mèn šubu]r-mèn [kur-kur(?) -ra kal-ga-mèn]
 - 2'. [ar-da-tum ana-k]u MIN ina ma-tim(?) [. . . -āku]
- (A dividing line precedes this couplet.)

Left Edge

The title of the balag is written over a partially erased line.

No. 5

Balag: im-ma-al-(la) gù dé-dé

Introduction

The fragment MMA 86.11.348 contains the beginning and the end of the second tablet¹ of the balag composition im-ma-al-(la) gù dé-dé.² MMA 86.11.348 joins the tablet from the Berlin Vorderasiatisches Museum published by G. Reisner as *SBH* 82 (VAT 231+) tightly, as can be seen on the sketch below.³ This join results in an almost complete tablet. The balag im-ma-al-(la) gù dé-dé was treated by M. Cohen in *CLAM* 2, pp. 604–36.⁴ This balag may

originally have been addressed to the goddess Ninisinna, while in the later tradition it is directed to Innin/Ishtar, in her various guises. It is listed in the big catalogue IV R² 53+:cols. i–ii 47. According to the entry in this catalogue it was concluded by the eršemma me-e gašan-mu, which is still unknown to us. In the late Babylonian period at Uruk it was sung in the regular cult for Ishtar of Uruk.⁵

As shown in the colophon, tablet MMA 86.11.348+ originally belonged to the Iddin-Papsukkal family. Only later, together with some other tablets, did it come into the possession of the Nanna-ù-tu family.⁶ It was written in the year 175 or 174 B.C. and thus dates to almost forty years before Ea-balāssu-iqbi founded the Nanna-ù-tu family library. There was another exemplar of the second *nishu* of the balag composition im-ma-al-(la) gù dé-dé in this library (*SBH* 66), as well as other tablets belonging to the same text.⁷ It is not possible to establish if the Nanna-ù-tu family originally had a complete edition of the balag at its disposal.

The surface of the fragment MMA 86.11.348 (here text A)⁸ is very abraded, so much so that many signs can be seen only in outline. It was therefore necessary to consult the known duplicates in the editing of the text. The beginning of the duplicate *SBH* 66 (here text B, collated by this author) is likewise considerably damaged. A third copy of the text, which was overlooked by M. E. Cohen in his edition in *CLAM* 2, pp. 604–36, is a fragment written in Assyrian script, K 4908 (here text C, collated by this author).⁹ It was published in copy and transliteration by A. Schollmeyer, “Weitere Verbesserungsvorschläge zu Langdon’s *Babylonian Liturgies*,” *ZA* 30 (1915/16), p. 83.¹⁰ A fourth copy of the text, found at Uruk, was published by E. von Weiher as text no. 125 in *SpTU* 4. This text is designated as text D in the transliteration below.¹¹ The preserved lines in MMA 86.11.348 obv. correspond to ll. a +2-a +19,¹² and the lines on MMA 86.11.348 rev. correspond to ll. a +104-a +119 in Cohen’s edition of the balags, *CLAM* 2, pp. 604–36.

The second *nishu* of the balag im-ma-al-(la) gù dé-dé recounts the irreversible, ruinous effect of the “day” (u₄ = ūmu), which destroys man, animal, land, and harvest—indeed the entire civilization.¹³ This violent destruction is ascribed to Enlil himself. The second part of the *nishu* forms a litany describing the sorrow of several goddesses—no doubt ultimately identified with Innin/Ishtar—over the destruction of their shrines. According to the text, however, Enlil ignores the grieving goddesses and looks at them with indifference.¹⁴

1. Or of the second *nishu*, respectively (see n. on l. 17', text B).

2. Contrary to S. H. Langdon, “A Classical Liturgy to Innini” *RA* 9 (1912), p. 5, the first tablet (and the first *nishu*, respectively) are still unknown. Langdon assumed that Langdon, *BL* 71 (with joins) and the duplicates were the first tablet in the series. However, Langdon, *BL* 71 belongs to the balag a-še-er gi₆-ta (see Black, “A-še-er Gi₆-ta,” p. 53).

3. After G. Reisner made the copies of the fragments published in *SBH*, p. 127 and p. 156, two additional fragments that join have been found (VAT 353 + 354 and Inv. VII 1580). This author will publish these fragments in a book of collations to the *SBH* texts.

4. See also Black, “A-še-er Gi₆-ta,” p. 51 no. 37; and Borger, “Schlüssel zu M. E. Cohen *CLAM*,” pp. 35–36.

5. See TCL 6, 48:obv. 6.

6. *SBH* 8, 17, and 37 (cf. note on rev. 18').

7. MMA 86.11.279(?), text no. 6; *SBH* 58 according to Black, “A-še-er Gi₆-ta,” p. 51. Black also lists *SBH* 64 and 65 as belonging to this text. It is possible that the fragment MMA 86.11.350 (text No. 10) also belongs to a tablet from the balag composition im-ma-al-(la) gù dé-dé.

8. The additional piece *SBH* 82 begins at MMA 86.11.348:obv. 16 (here l. 15). The first five lines in *SBH* 82 obv. contain the first halves of the lines MMA 86.11.348:obv. 16–20. These passages in text A are underlined in the transliteration. The text then continues on *SBH* 82:obv. 6ff.

9. Readings from this author’s collations that differ from the published copy are marked with exclamation points.

10. It is not absolutely certain that K 4908 belongs to the balag composition im-ma-al-(la) gù dé-dé. It could also contain a part of a prayer that merely parallels the second *nishu* of this balag. Before l. 3' on K 4908 traces of two additional lines are preserved that are separated from the following line by a ruling. If K 4908 in fact belongs to the balag im-ma-al-(la) gù dé-dé, then it would originally have contained the first and the second *nishu* of the series. The end of the first *nishu* would then have been preserved on K 4908:1'-2'.
11. The copies B, C, and D are not fully treated. They have only been used when they further the clarification of the main text on MMA 86.11.348.
12. Cohen in *CLAM* 2, p. 607, overlooked MMA 86.11.348:obv. 14 = SBH 66:obv. 17-18 = K 4908:16' = von Weiher, *SpTU* 4, 125:obv. 12 (here l. 13).
13. See Cohen, *CLAM* 2, p. 607, l. a+21.
14. See rev. l. 15'.

5.

MMA 86.11.348 + SBH 82 (VAT 231)

Plates 8, 9

H. 67 mm W. 67 mm Th. 23 mm

Duplicates

A = MMA 86.11.348

Balag: im-ma-al-(la) gù dé-dé

B = SBH 66

S. E. 137 / 138 (= 175 / 174 B.C.) (Babylon)

C = K 4908 A. Schollmeyer, ed., "Weitere Verbesserungsvorschläge zu Langdon's *Babylonian Liturgies*," ZA 30 (1915/16), p. 83

1-15

D = von Weiher, *SpTU* 4, 125

1-19; 1'-16'

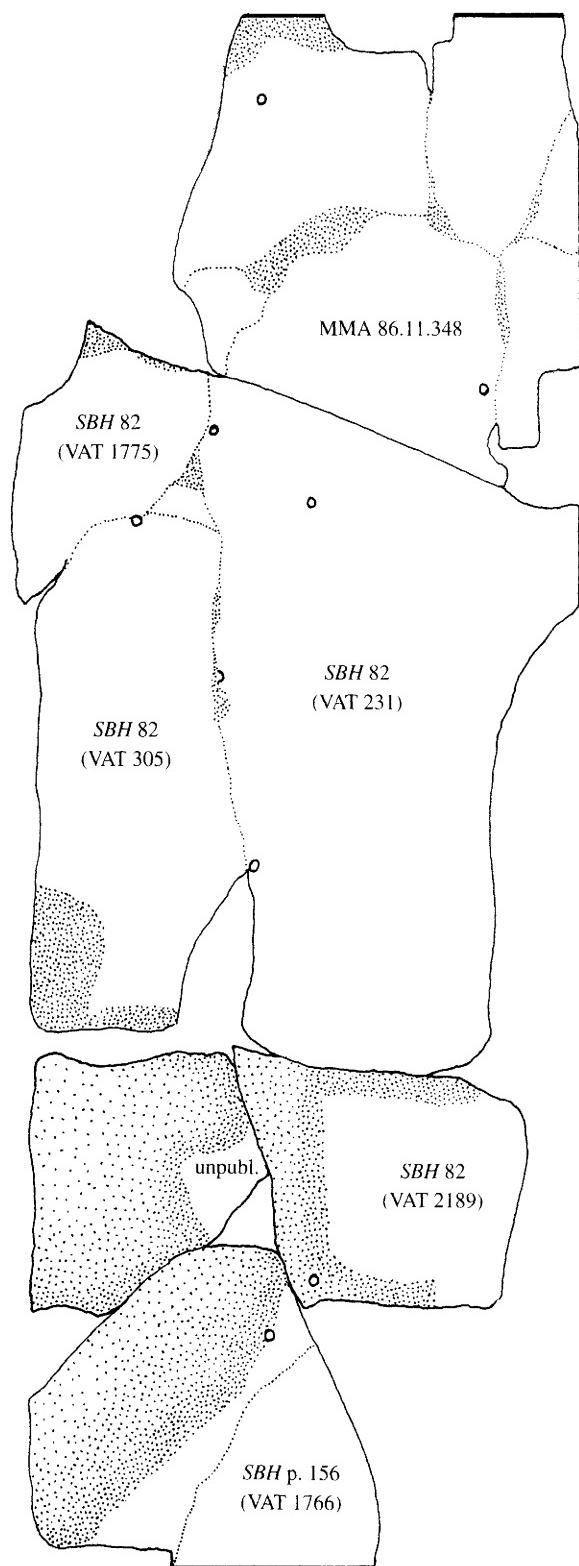
Upper Edge

B [ina a]mat ^d+b[ēli(E[N]) u ^dbēltī(GAŠAN)-iá liš-lim]

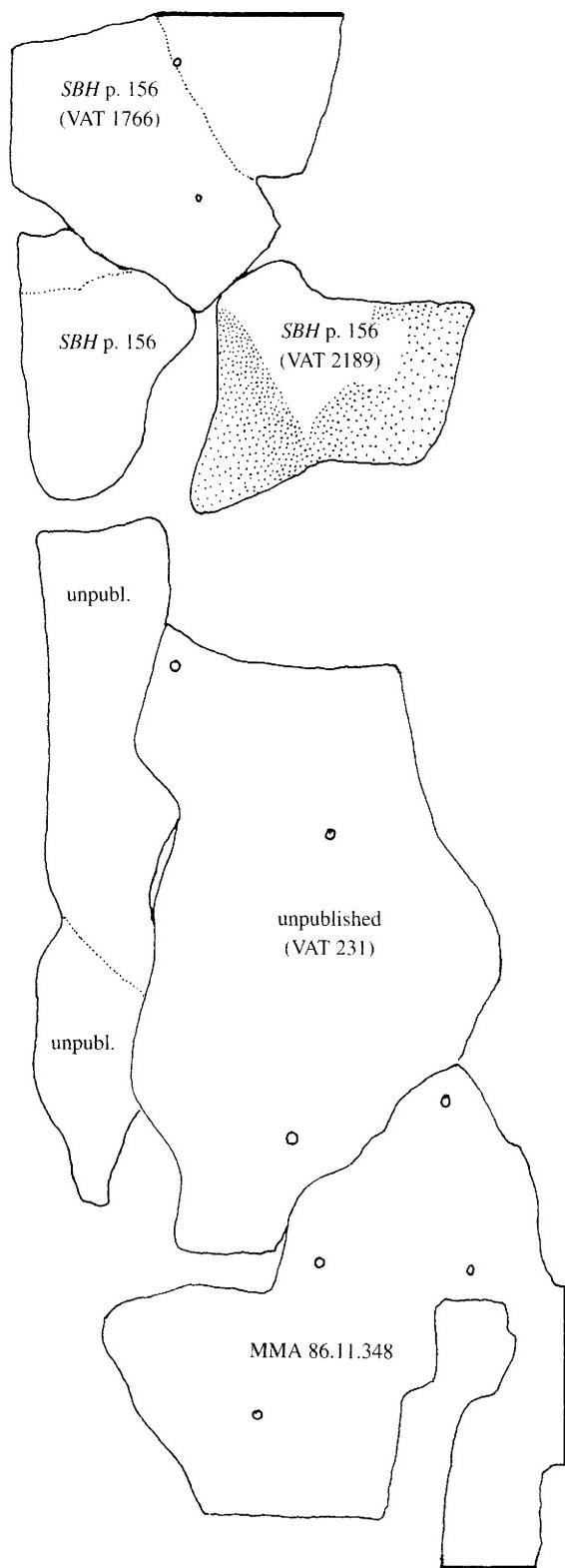
Obverse

- | | | |
|---------|---|--|
| 1. A 1. | [u ₄ -dè gig-ga]-'àm' | [áb-a-gin ₇ mu-un-zal] |
| B 1. | 'u ₄ ¹ -[d]è 'gig-ga ¹ -[àm] | [áb-a-gin ₇ mu-un-zal] |
| C 3'. | [u ₄ -d]è gig-ga-àm | áb-a-gin ₇ [. . .] |
| D 1. | [u ₄]-dè u ₄ gig-ga-àm | áb-a-gin ₇ mu-un-zal |
| | | |
| A 2. | [u ₄ -mu mar-ṣu] | kīma(¹ GIM)(?) lit(?) -ti(?) ¹ [uštabri(?)] |
| B 2. | ana u ₄ -mu mar-ṣu | [kīma litti uštabri(?)] |
| C 4'. | [u] ₄ -mu mar-ṣu | ki-ma lit-t[i uštabri(?)] |
| | | |
| 2. A 3. | [é-a u ₄ -dè gig-ga-àm] | áb- (empty) |
| B 3. | é-a u ₄ -dè gi[g]-'ga ¹ -à[m] | [áb- (empty)] |
| C 5'. | [x(!)] é-a u ₄ -dè gig-ga-àm | áb- (empty) |
| D. | (caret) | |

Obverse



Reverse



3.	A 4.	[ám mu-un-gur ₁₁ -ra]	'ám kar-kar-ra ¹ -m[u(?)]
	B 4. ^x	ám m[u]-'un-gur ₁₁ ¹ x x	á[m kar-kar-ra-mu](?)
	C 6'.	[á]m mu-un-gur ₁₁ -ra	ám [. . .]
	D 2.	[á]m(?!)-bi mu-un-kur-ra	ám kar-kar-ke ₄
4.	A 5.	[u ₄ gig-ga-àm]	u ₄ gig-'ga ¹ -à[m]
	B 5. ^{E(?)}	'u ₄ ¹ gig-ga-àm	'u ₄ ¹ [gig-ga-àm]
	C 7'.	[u] ₄ gig-ga-àm	u ₄ g[gig-ga-àm]
	D 3.	[u ₄ g]ig-ga-àm	u ₄ gig-ga-àm
5.	A 6.	[u ₄ gig-ga-àm]	u ₄ še-ša ₄ -x [d]a-mi-mu
	B 6. ^E	u ₄ gig-ga-à[m]	u ₄ [še-ša ₄ -x]
	C 8'.	'u ₄ ¹ gig-ga-àm	'u ₄ ¹ [. . .]
	D 4.	[u ₄ gi]g-ga-àm	u ₄ še (copy: KUR)-ša ₄ -àm
6.	A 7.	[u ₄ gig-ga-àm]	u ₄ kur-ra 'diri ¹ -g[a] u ₄ -[m]u mu-šá-'ter ¹ ma-tim
	B 7.	u ₄ gi[g]-ga-àm	[. . .]
	C 9'.	[u ₄ g]ig-ga-àm	[. . .]
	D 5.	[u ₄ gi]g-'ga ¹ -àm	u ₄ kur diri(?!)-ga
7.	A 8.	[u ₄ šà-ab an-na]	u ₄ šà-ab- ^d M[u-u]l-l[í]l-le
		[u ₄ -mu] lib-bi ^d A-nim	u ₄ -mu lib-bi ^d MIN
	B 8. ^E	[u] ₄ 'šà ¹ -ab an-na	[u ₄ šà-ab ^d Mu-ul-líl-le]
	9.	[u ₄]-'mu ¹ lib-bi ^d A-n[im]	[úmu libbi ^d Enlil]
	C 10'.	[u ₄]à-ab an-na	[. . .]
	D 6.	[u ₄ šà-(ab) a]n-na	šà ^d Mu-ul-líl-lá-le
8.	A 9.	[u ₄ šà íb-ba]	An-gu-la-ri
		[u ₄ -mu nu-u]g-gat lib-bi	šá ^d A ¹ -nim ra-bi-i
	B 10. ¹¹	u ₄ šà íb-ba	[An-gu-la-ri]
		u ₄ -mu nu-u[g-gat lib-bi]	[šá Anim rabî]
	C 11'.	[u ₄]à íb-ba	[An-gu-la-ri]
	D 7.	[u ₄ šà íb]-ba	An-gu-la-ra
9.	A 10.	[u ₄ šà-ab ḥul ma-al-la]	^d Mu-ul-líl-lá-ri
		[u ₄ -mu] lib-bi ^d +En-l[l]	[šá lem-n]iš 'i-ba-áš-šu-ú'
	B 11.	u ₄ šà-ab ḥul ma-'al-la ¹	^d M[u-ul-líl-lá-ri]
	12.	u ₄ -mu lib-bi ^d MIN šá lem-[n]iš 'i ¹ -[ba-áš-šu-ú]	[^d Mu-ul-líl-lá-ri]
	C 12'.	[u ₄]à-ab ḥul ma-al-la	[^d Mu-ul-líl-lá-ri]
	D 8.	[u ₄ šà-(ab) ḥ]ul ma-al-la	^d Mu-ul-líl-lá-le(?!: copy NE?)

10.	A 11.	[u ₄ ḥuš-e] [u _{4-m}]u ez-zu	‘sag-gi ₆ til ¹ -e ga-me- ¹ ru ¹ šal-mat ‘qaq ¹ -qa-[di]
	B 13. E	[u] ₄ ḥuš(!)-e u ₄ -mu ez(!)-zu	sa[g-gi ₆ til-e] [gāmeru šalmāt qaqqadi]
C 13'.		[u ₄ ḥ]uš(!)-a	[sag-gi ₆ til-e]
D 9.		[.]	sag-gig ti-la-e-dè
11.	A 12.	[u ₄ nu-è-a] [u ₄ -mu la i]l-li mu x [. . .]	[u ₄ am]a- ¹ gan ¹ nu-un-zu-a-ri u ₄ -mu šá u[m-m]u [a-lit-t]a la i-du-ú
	B 14. [.]	u ₄ nu-è-a 15. u ₄ -mu la ¹ il-li ¹ mu x x [. . .]	u ₄ ama-gan nu-un-zu-a-ri [.]
C 14'.		[u ₄ nu]- ¹ è ¹ -a(!)	[.]
D 10.		[.]	[u ₄ (?)] x gál nu-zu-a-ra
12.	A 13.	[u ₄ sa ₅ -e (?)] [u ₄ -mu x]-x-šú	u ₄ ḥul-[gá]l(?)-e u ₄ -mu mu-šal-pí-[tu]m
	B 16. [.]	[u ₄] s[i]- ¹ e(?) ¹ u ₄ (?)-m[u(?)] x x-šu	[.]
C 15'.		[u ₄ sa ₅ (?)]- ¹ e ¹	[.]
D 11.		[.]	u ₄ ḥul-a-ra
13.	A 14.	[u ₄ i-bí-ba (?)] [u ₄ -mu šá p]a-ni-šú	‘ur(?) ¹ nu- ¹ ma ¹ -al-la-ri x x x x x [l]a [i-šu(?)]- ¹ ú ¹
	B 17. [.]	[u ₄] ¹ i(?)-bí(?)-ba(?) ¹	x [.]
B 18.		{ u } ₄ -mu šá [pa]- ¹ ni(?) ¹ -[š]u(?)	x [.]
C 16'.		[.]	[.] (empty)
D 12.		[.]	x ur(?!?) nu-ma-al-la-ra
14.	A 15.	[u ₄ dam sa ₆ -ga] [u ₄ -mu šá mu]- ¹ ta ¹ dam-qa	nu- ¹ un-zu-a ¹ -ri la i-du- ¹ ú ¹
	B 19. [.]	¹ u ₄ ¹ [dam sa] ₆ -[g]a u ₄ -mu šá mu-tú(!) dam(!)-qa	n[u-un-zu-a-ri] [lā idā]
C 17'.		[u ₄ dam sa ₆ -g]a	[.]
D 13.		[u ₄ dam si]g ₅ -ga	n[u]-zu-a-ra
15.	A 16.	[u ₄ dumu <u>sa₆-g</u> a] [šá ma-r]i	nu-
	B 20. [.]	[u ₄ dumu sa] ₆ -ga šá(!) ma-ri	nu- ¹ un ¹ -[zu-a-ri]
C 18'.		[u ₄ dumu sa ₆ -g]a (remainder of tablet broken)	[.]
D 14.		[u ₄ dumu sig ₅]ga	nu-zu-

16.	A 17.	[u ₄ ama nu-un-zu-a-ri] [šá um-ma]	u ₄ a-a nu-un-zu-' ^a ri ¹
	B 21. []	[u ₄ ama n]u-un-zu-a-ri	[u ₄] a-a nu-u[n-zu-a-ri]
	D 15.	[u ₄ a-a nu-z]u-a-ra	u ₄ ama nu-zu-a-ra
17.	A 18.	[u ₄ dam nu-un-zu-a-ri]	'u ₄ dumu ¹ nu-un-zu-a-r[i]
	B 22. []	[u ₄ dam nu-un-zu-a-r]i	u[u ₄] dumu nu-' ^u n-[zu-a-ri]
	D 16. []	[u ₄ dam nu-z]u(?!)-a-ra	u ₄ dumu nu-zu-a-ra
18.	A 19.	[u ₄ nin ₍₉₎ nu-un-zu-a-ri]	u ₄ še]š nu-un-z[u]-a-r[i]
	B 23. []	[u ₄ nin ₍₉₎ nu-un-zu]-' ^a l-ri	u ₄ šeš nu-un-[zu-a-ri]
	D 17.	[u ₄ nin ₍₉₎ nu-z]u-a-ra	u ₄ šeš nu-zu-a-ra
19.	A 20.	[u ₄ usar nu-un-zu-a-ri] [u ₄ -mu šá ši(!)-it-ta la(!) i-du-ú] (rest of obverse preserved in SBH 82:obv. 6ff.)	u ₄ ma-al nu-un-z]u-a-[ri] šá r[u-tú lā idū]
	B 24. []	[u ₄ usar nu-un-zu-a-ri] [u ₄ -mu šá ši-it-tum l]a i-du-ú	u ₄ ma-al nu-un-zu-a-[ri] šá ru-tú MIN
	D 18. []	[u ₄ usar nu-zu]-' ^a l-ra	u ₄ ma-a[l] nu-zu-' ^a l-ra

Reverse

1'.	A 1'.	[èš gú-ab-ba-ke ₄]	[ba]-(ḥul-a-šè)
	B 37.	èš gú-ab-ba-ke ₄ ^A	ba-
	D 8'.	[è]š gú-ab-ba-ke ₄	ba-
2'.	A 2'.	[Gašan-MAR.KI èš gú-ab-ba-ke ₄]	[u ₄] (mu-un-zal gù bí-in-ra)
	B 38.	Gašan-MAR.KI èš gú-ab-ba-ke ₄	u ₄
	D 9'.	[.] x x èš g[ú]-ab-' ^{ba} l-k[e ₄]	[u-zal (ga-bi bi-ra)] :
3'.	A 3'.	[dumu-sag ub-ba-ke ₄]	ba]-
	B 39.	dumu-sag ub-ba-ke ₄ ^A	ba-
	D 9'.	dumu-sag(?!)(copy: AN BA) SAR-ra-ba-ke ₄	ba-
4'.	A 4'.	[ama-mu Na-an-na-ke ₄]	u ₄]
	B 40.	ama-mu Na-an-na-ke ₄	u ₄
	D 10'.	[ama-m]u ^d Na-a[n-na-ke ₄]	u-za]l :
5'.	A 5'.	[še-eb Zimbir ^{ki} -a-ke ₄]	[b]a-
	B 41.	še-eb Zimbir ^{ki} -a-ke ₄ ^A	ba-
	D 10'.	še-eb Zimbir ^{ki} -ke ₄	ba-

6'. A 6'.	[^d A-a nu-nus sa ₆ -ga-ke ₄	<u>u</u> ₄
B 42.	[^d A-a nu-nus sa ₆ -ga-ke ₄	<u>u</u> ₄
D 11'.	[^d A-a nu-n]us sig ₅ - ¹ ga ¹ -ke ₄	u-zal :
7'. A 7'.	[.....]	[<u>b</u>]a-
B 43.	še-eb Tin-tir ^{ki} na-ám-kal-ga-ke ₄ ^A	ba-
D 11'.	še-eb Tin-tir ^{ki} -ke ₄	ba-
8'. A 8'.	[.....]	<u>u</u> ₄
B 44.	égi maḥ kù gašan Tin-tir ^{ki} -ke ₄	<u>u</u> ₄
D 12'.	[égi m]aḥ gašan Tin-ti[r] ^{ki} -ke ₄	u-zal :
9'. A 9'.	{.....} ^A	ba-
B 45.	še-eb Bàd-si-ab-ba ^{ki} -ke ₄ ^A	ba-
D 12'.	še-eb Bàd-si-ab-ba-ke ₄	ba-
10'. A 10'.	[.....]	<u>u</u> ₄
B 46.	gašan é-dim-an-ki-ke ₄	<u>u</u> ₄
D 13'.	[gaša]n 'é ¹ -di[m-a]n-na-ke ₄	u-zal
11'. A 11'.	[u ₄ mu-un-zal gù bí-in-ra]	<u>u</u> ₄
B 47. ŠUB	u ₄ mu-un-zal gù bí-in-ra	<i>ina e-reb</i> ^d Šamši(U[TU]) ^{'ši} <i>ina šá-se-¹e¹-[šá]</i>
48.	<i>ina e-reb</i> ^d Šamši(UTU) ^{ši} <i>ina ša-se-e-ša</i>	<u>u</u> ₄
D 14'.	[u-zal ga-bi] b[i-r]a	u-zal ga-bi bi-ra
12'. A 12'.	[gú-gú-ba gi-ḥul-a in-mar-re-eš]	<u>u</u> ₄
B 49. ŠÈM	gú-gú-ba gi-ḥul-a in-mar-re-eš	<i>ina nap-«pa»-ḥa-r{i-ši-na gu-uḥ-li-a id-di-a-am-ma</i>
50.	<i>ina nap-ḥa-ri-ši-na gu-uḥ-li-a id-di-a-am-ma</i>	<u>u</u> ₄
D 15'.	[gú-gú-ba gi]-ḥul-g[á]l(?) ma-al	u-zal
13'. A 13'.	[ér in-šéš-šéš-e-n]e ba-ni-í[b]-zal-zal-e-[n]e	<u>u</u> ₄ A
	[.....] : [x] ú(?)-ra	<i>i-s[a-pí-id</i> x
B 51.	ér in-šéš-šéš-e-ne bar in-zal-zal-e-[n]e	<u>u</u> ₄
52.	¹ s-a-pí-id(-)ma LU Ú DA	
D 16'.	[.....] x x (-)in-zal-zal-e-ne	u-zal
14'. A 14'.	[únug-ba a-e nu-š]à-ra-ge	<u>u</u> ₄ (erasure) A
	[ina ú-nu]	<i>dim-t[u ul ib-b]al</i>

B 53.	únug-ba a-e nu šà-ra-ge	u ₄
54.	ina ú-nu dim-tu ul ib-bal-la	
D 17'.	[únug-ba a]- ^t e ¹ [nu]-mu-un-šár-ra-ga	u-zal
15'. A 15'.	[^d Mu-ul-líl gú in-šu]b i-bí mu-un-ši-in-bar-[r]a	u ₄
	šá [^r bu ¹ -n[i-šú i]p- ^t pa(?) ¹ -[lis. . .] ^{he-pí eš-šú}	A
B 55.	[^d Mu-ul-líl gú in-šub i-bí mu-un-ši-in-bar-ra u[₄]	
56.	šá bu-ni-šú ip- ^{he-pí eš-šú} -ši-in	[]
D 18'.	[^d Mu]-ul-líl gù in-šub i-bí mu-un-ši-in-bar u-zal ga-bi (bi-ra)	
16'. A 16'.	[é-an-na ḥul-a-bi-ṣè] ^t E ¹ ^t dè-è ¹ [m-m]à- ^t lù ¹ x lù ^U <i>an-na i-lu-u</i>	
	ana zamāru(DU ₁₂) ^{ra}	
B 57. A	é-an-na ḥul-a-bi-ṣè _E dè-èm-mà-lù-[. . .]	
D 19'.	[é]-an-na ḥul-bi-ṣè dè(?!)-en(?!)-lù(?!)	(empty)
17'. A 17'.	[. DUB(?) MI]N.KAM* im-ma-al-la gù dé-d[é NU A]L.TIL GABA.RI ^t Bar ¹ - ^t sip ^t ki ¹	
B 58.	<i>nis-ḥi</i> MIN ^u im-ma-al gù-dé-dé NU AL.TIL ana zamāru(DU ₁₂) ^{ra}	
59.	x	
D.	caret	
18'. A 18'.	[.] ^t ndAG-TIN-su-E A ^t MU- ^d Pap-sukkal [^{lú} GA]LA.TUR ^{dr} AG ¹ [. . .]	
19'. A 19'.	[x x (x) ^{ki} iti _X UD.X]. ^t KAM* MU 1 ME 30+x ¹ .K[AM* ^t An-t]i- ^t u-uk-x-s[u LUGAL]	

Translation

Upper Edge: Epigraph

[At the com]mand of the Lo[rd and My Lady may (what I am doing) be successful.]

Obverse

1. The day that is terrible [she spent (crying)] like a cow.
D: The day, a day that is terrible, she spent (crying) like a cow.
Akk.: (A, C): The terrible day [she spent (crying) like a cow].
Akk.: (B): Because of the terrible day [she spent (the time crying) like a cow].
2. In the house (she spent) the day that is terrible (crying like) a cow:
3. “(O) my goods that had been my property, my goods that have been taken away!”
4. The day that is terrible, the day that is terrible,
5. the day that is terrible, the day that is moaning,
6. the day that is terrible, the day that smashes the mountain,
Akk.: (the terrible day), the day that tears down the land,
7. the day, the heart of An/of heaven, the day the heart of Enlil,
8. the day, the angry heart of the Great An,

9. the day, the evil-producing heart of Enlil,
Akk.: the day, the heart of Enlil, that comes into existence in an evil way.
10. the furious day killing the black-headed people,
11. the day that will not go away, the day that has no regard for a bearing mother,
12. the disturbing(?) day, the destructive day,
13. the day whose face has no enemy(?),
14. the day that has no regard for a good spouse,
Akk.: the day that has no regard for a good husband,
15. the day that has no regard for a good child,
Akk.: the day that has no regard for a good son.
16. the day that has no regard for a mother, the day that has no regard for a father,
17. the day that has no regard for a spouse, the day that has no regard for a child,
18. the day that has no regard for a sister, the day that has no regard for a brother,
19. the day that has no regard for a woman neighbor, the day that has no regard for a woman companion.
(rest of obverse preserved in SBH 82:obv. 6ff.)

Reverse

- 1'. Because the shrine of Guabba had (been destroyed),
 - 2'. the Lady-of-MAR.KI (and) of the shrine of Guabba (spent the whole) day (crying).
 - 3'. Because Dumusagubba had (been destroyed),
 - 4'. my mother Nanâ (spent the whole) day (crying).
 - 5'. Because the brickwork of Sippar had (been destroyed),
 - 6'. Aya, the goodly woman (spent the whole) day (crying).
 - 7'. Because the brickwork of Tintir / Babylon, (the city) of might (lacking from D), had (been destroyed),
 - 8'. the lofty princess, the holy one (lacking from D), the lady of Tintir / Babylon (spent the whole) day (crying).
 - 9'. Because the brickwork of Borsippa had (been destroyed),
 - 10'. the lady of the Edimanki (D: Edimanna) (spent the whole) day (crying).
 - 11'. She spent the whole day crying; (she spent the whole) day (crying).
Akk.: When the sun sets, when she cries,
 - 12'. All of them performed the gestures of mourning. (They(?) spent the whole) day (crying).
 - 13'. They shed tears, they spent(?) (the whole day). (They(?) spent the whole) day (crying).
Akk.: She mourned . . .
 - 14'. On their cheeks the water does not (Akk.: the tears do not) dry. (They(?) spent the whole) day (crying).
 - 15'. Enlil ignored them. He (just) looked at them. (They(?) spent the whole) day (crying).
Akk.: He looked at that which was in his sight, their ^{new} break
-
- 16'. Because Eanna has been destroyed, she has been thrown in confusion. (A adds: for singing).
 - 17'. A: [x lines (which are) counted]. 2nd [tablet] (of the balag composition) im-ma-al-la gù dé-d[é; not com]pleted. (Copied from) an original from Borsippa.
B: 2nd *nishu* (of the balag composition) im-ma-al gù dé-dé; not completed. (Copied) for singing.

- 18'. [(Long) tablet of , the son of] Nabû-balâssu-iqbi, the son of Iddin-Papsukkal, the *kalâ*
apprentice of Nabû.
- 19'. [City of], the *xth* [of the month], in the year 130 + *x* (when) Antiochus was king.

Notes

Obverse

- 1: The second part of the line has become known only recently through text D (von Weiher, *SpTU* 4, 125). M. E. Cohen's reading of l. 1 (*CLAM* 2, p. 606, a +2) following van Dijk, *Texte aus dem Rêš-Heiligtum*, p. 31, 27:7, is not correct.
- 2: é is not the first sign in copy C, which differs from copies A and B. It remains uncertain which sign was written here; most likely, a = "alas" can be restored. L. 2 has áb- as the abbreviation for the refrain áb-a-gin₇-mu-un-zal. It is uncertain whether this refrain was repeated in the following lines.
- 3: On the left edge of copy B there are faint traces of a gloss (musical notation?). G. Reisner overlooked this gloss in his copy of the text (*SBH*, p. 117, no. 66, obv.). Probably the sign E was written on the left edge in l. 3, as well as in ll. 4, 5, 7, and 10. The left edge of the tablet is broken off from line 14 in *SBH* 66, obv. (here, l. 11). The remaining traces on B obv. l. 4 can best be read ám m[u]-un-^rgur₁₁-[r]a. The phonetic writing mu-un-kur-ra confirms the reading mu-un-gur₁₁(GA).
- 4: This section (ll. 4–19) describing the destructive effect of the "day" (u₄ = ūmu) is largely paralleled in the beginning of the 16th *kirugu* of an Old Babylonian balag composition, CT 36, pl. 45 (BM 96691) rev., col. ii 13–21:

- | | |
|---|-----------------|
| 13. u ₄ gig-ga-àm u ₄ gig-ga-àm | (= l. 4) |
| 14. u ₄ gig-ga-e u ₄ še-ša ₄ -e | (= l. 5) |
| 15. u ₄ huš-e sag gi ₆ til-e | (= l. 10) |
| 16. u ₄ nu-è ama-gan nu-zu-e | (= l. 11) |
| 17. u ₄ i-bí ı̄l nu-ma-al-la- ^r e ¹ | (compare l. 13) |
| 18. u ₄ sa ₅ -e u ₄ hul-a-e | (= l. 12) |
| 19. u ₄ dam sa ₆ -ga nu-zu-a- ^r e ¹ | (= l. 14) |
| 20. u ₄ du ₅ -mu sa ₆ - ^r ga ¹ [nu-zu-a-e] | (= l. 15) |
| 21. u ₄ ama [nu-zu-a-e] | (= l. 16a) |
| (remainder lost) | |

M. E. Cohen cites the above text and M. Cığ, H. Kızılıyay, *Sumer Edebî Tablet ve Parçaları—I*, Türk Tarih Kurumu Yayınlarından—VI. Seri, Sa. 13 (Ankara, 1969), pl. 209 (Ni 13236), obv. 3–6 as parallels in his commentary:

- | | |
|---|-----------|
| 3. úru-a u ₄ huš-a sag-gi ₆ til-la | (= l. 10) |
| 4. u ₄ sa ₅ -e u ₄ hul-a-e | (= l. 12) |
| 5. u ₄ dam sa ₆ -ga nu-zu-a-e | (= l. 14) |
| 6. u ₄ dumu sa ₆ -ga nu-zu-a-e | (= l. 15) |

- 5: Only faint traces remain of the last sign in this line in MMA 86.11.348. Cohen (*CLAM* 2, p. 606) reads a, but this is certainly wrong. The traces may be read m[u], although this is difficult in the context.

- 6: The emendation of the sign KUR to še(!), suggested by von Weiher in *SpTU* 4, p. 17 (text D), is unnecessary. As shown in the parallel text A, von Weiher's copy (KUR) is correct. He transliterates the following signs kal-ga, but the sign following KUR in his copy looks like a mixture of the signs KAL and DIRI. The Akkadian version of copy A suggests that the reading diri is the more probable.
- 7–9: See the parallels presented by Krecher in *Kultlyrik*, p. 211 on VIII 29*–31*. The peculiar writing šā ^dMu-ul-líl-lá-le in text D (cf. also l. 9; D, 8) should be set alongside the variants šā-ab ^dMu-ul-líl-lá and šā-ab ^dMu-ul-líl-le (as in text A).
- 9: Compare Maul, "Herzberuhigungsklagen," p. 234, Eš 45:14', where šā-ab ḥul ma-al-la is translated *libbi ša lumna šaknu* as opposed to the expected *lumun libbi* (cf. MSL 17, 47 Erimhuš III, 13).
- 10: See the parallels mentioned in the Note to l. 4 above.
- 11: Perhaps text D (defectively) had am|a(?!)-gál (instead of ama-gan)?
- 12: For the restoration compare the parallel texts cited in the Note to l. 4 above. The traces of the Akkadian version of the line (*SBH* 66:obv. 16) can perhaps be read *u₄-m[u] m[uš-š]i-šu* (very uncertain!). For the equation *sa₅ = ašāšu; ašuštu* see Maul, "Herzberuhigungsklagen," p. 349, and *CAD A / 2*, p. 423 s.v. *ašāšu*.
- 13: This line is missing in Cohen, *CLAM 2*, p. 607. Compare the parallels cited in the commentary to obv. l. 4 and l. 398 of *Lamentation over the Destruction of Ur* (S. N. Kramer, AS 12 [Chicago, 1940], p. 64) and the duplicate UET 6 / 2, 139:rev. 43: *u₄-ri u₄ igi ur [nu(?)-g[ál(?)]-la-ri*.
- 16–19: These lines parallel ll. 400–403 of *Lamentation over the Destruction of Ur* (AS 12), p. 64. Cf. the duplicate UET 6 / 2, 139:rev. 44–47 (not known to S. N. Kramer at the time).
- 19: Cf. MSL 13, p. 257, 166–67:
- | | |
|---|---|
| 166. <i>u₄ usar n[u-zu]</i> | <i>[u₄-mu ša še-i-tam la i-du-ú]</i> |
| 167. <i>u₄ ma-la nu-[zu]</i> | <i>[u₄-mu ša ru-ú-tam la i-du-ú]</i> |
- For *usar* see also C. Wilcke, "ku-li," ZA 59 (1969), pp. 86–89 with n. 90.

Reverse

- 1': The refrain of the litany is written out in full in *SBH* 66:3–5 (p. 118 top) and *SBH* 66:rev. 1. With ll. 1'ff. compare a very similar litany from another tablet from the balag composition im-ma-al gù dé-dé, in Cohen, *CLAM 2*, pp. 614–15, b + 190ff., as well as the fragmentarily preserved litany on text No 6:rev. For Gu'abba, "the shore," the deep seaport of the state of Lagaš, see D. O. Edzard, "Gu'aba," *RLA* 3 (1957–71), p. 721.
- 2': For Gašan / Nin-MAR-KI see Note to text No. 7:rev. 4.
- 3': The structure of the litany shows that dumu-sag ub-ba must be a place name, which seems to be mentioned only here. The variant in text D is unclear.
- 10': The temple name é-dim-an-ki probably indicates the temple of Sîn at Borsippa, otherwise known as é-dim-an-na (as in text D).
- 11': The Akkadian version of this line is to be taken as an interpretation rather than a translation of the Sumerian line, as is often the case with the bilingual texts from the library of the Nanna-ù-tu family.
- 13': The meaning of bar-zal (text B) is unknown. Text A (ba-ni-ib-zal-zal-e-ne) offers the easier reading. It can hardly be decided which version of the two is the original and thus the correct one. ér-šeš is rather freely rendered as *sapādu*, "mourn," in the Akkadian versions of both text exemplars. The meaning of *ma(-)LU Ú DA* is uncertain (see in this connection the commentary by Cohen in *CLAM 2*, p. 635 to l. 116). ú(?)-ra in

text A probably stands for *urra*. The translator of the Sumerian text certainly had in mind $u_4\text{-zal} = urru$, “a (clear) day.” *únug* is normally rendered *usukku*, so either this is a hitherto unknown loan unu from *únug* (Reisner’s *ú-BAR* is wrong) or it is a corruption of *usukki*.

- 15': *ša būnišu* reproduces the Sumerian *i-bí*, although *i-bí-bar* was interpreted as *naplusu* (compare B, obv. 56: *ip^{he-pi} eš-šū*). The expression *ša būnišu*, otherwise unattested, has a parallel in the expression *ša pāni* + suffix (cf. *AHw*, p. 814b s.v. *palāsu(m)* 3). *gú-šub*, “let the head / the neck droop; turn away” is the antonym for *gú-zi* (Akk.: *rēša/kišāda šuqqū*), “raise the head,” an expression often used in the “lamentations to soothe the heart” when imploring the deity to turn back to the worshipper: *gú-zu zi-mu-un-ši-ib* (see Maul, “Herzberuhigungsklagen,” p. 24). *gú-šub* may be rendered by a less graphic but equally correct Akkadian term *zenū*, “be angry” (cf. *CAD Z*, p. 85 s.v. *zenū*). The suffix *šin(a)* in the Akkadian version of the line refers to the goddesses mentioned in the litany, as is also the case in l. 12'.
- 16': The third *nishu* of the balag *im-ma-al-(la)* *gù dé-dé* cited in this catch-line is still missing, despite the claim of S. Langdon, *Sumerian and Babylonian Psalms* (Paris, 1909), pp. 31–35. *an-na i-lu-u* is more an instruction for the performance of the song than a pronunciation gloss to (*d*)*è-èm-ma-lù-lù*. See the similar gloss in text No. 8:rev. 5' (MMA 86.11.346+) and the commentary there in Note to rev. 5'. Note the glosses in CT 42, 12, where in obv. 30, *i-lu-ke₄* occurs with the gloss *i-lu-ú-ú-ak-ke-e*, and *i-lu na-a-ám-in-[ra]* with the gloss *i-lu-u-na-gi-in-e-ra-a*. Further, compare the gloss for the refrain *zag-dib-ba a-nir-ra : zag-ga-dib-ba-a-ni a-ši-ir-ra-(a)* in CT 42, 12:rev. 21 and 24 on the left edge.
- 17': The beginning of the line may perhaps be restored from the colophon of *SBH* 17 (VAT 369):rev. 8: *x-àm mu-šid-bi(?)*. After that the line may have continued [. . . IM.GÍD.DA MI]N.KAM* etc., instead of DUB (as in *SBH* 37:rev. 18). The scribe of text B began his line (rev. 59) with the sign *qât* (= hand of), but he did not continue the line and partially erased this first sign.
- 18': MMA 86.11.348+ was probably written by a son of Nabû-balâssu-iqbî. Compare *SBH* 17:rev. 7: ^{ld}+Bêl(EN)-*uballit*(TIN)ⁱⁱ *māru(A)* *šá* ^{ld}*Nabû*(AG!) *balāt*(TIN)-*su-iqbî(E)* *mār(A)* ¹*Iddin*(MU)-^d*Pap-sukkal ana zamāri*(DU₁₂) *iš-tur-ma [ibri]*. *SBH* 17 was written in December of 150 B.C., approximately twenty-five years after the MMA text treated here. In the library of the Nanna-ù-tu family there were two more tablets that had originally belonged to the Iddin-Papsukkal family (*SBH* 8 and *SBH* 37, tablet of Nabû-nâdin-šumi, descendant of Iddin-Papsukkal).
- 19': The city where the tablet was written was named at the beginning of the line. The beginning of MMA 86.11.348:rev. 19' should be restored *E^{ki}* or *TIN.TIR^{ki}* (= Babylon) in accordance with the colophon of the tablet *SBH* 8:rev. 23, which was originally in the possession of the Iddin-Papsukkal family and which was written in Babylon. Only the upper part of the signs with the date remain. The reading '1ME 30' can be considered certain. The following traces can be read as 5, 6, 7, or 8 (9 is always written with three slanted *winkelhaken* in the texts from the library of the Nanna-ù-tu family). Because the reading of the name of the king is as good as certain, we can eliminate years 135 and 136 of the Seleucid era, since Seleucus IV Philopater ruled during those years. Antiochus IV Epiphanes took the throne in the sixth month at the latest of the year 137 of the Seleucid era (= end of September 175 B.C.). Consequently, the present tablet must have been written either in year 137 or year 138 of the Seleucid era (= 175 or 174 B.C.).

No. 6

Balag

Introduction

The fragment MMA 86.11.279 is the upper left corner of a large balag tablet. Only some three to four lines at the beginning are missing. It is not clear which balag this fragment belongs to, since no duplicate of MMA 86.11.279 is known so far. The preserved parts of the obverse and the reverse offer only conventional litanies, and the refrains are preserved either very badly or not at all, making the identification of the balag difficult. For this reason the translations are only tentative. However, it is clear that the first litany describes a goddess grieving over the destruction and looting of her shrines.¹ In the second litany, which is preserved on the reverse, the author of the text laments that this goddess has abandoned her shrines. The second litany largely parallels a litany known from the balag composition im-ma-al-(la) gù dé-dé.² Thus it is not impossible that the fragment MMA 86.11.279 belongs to a tablet in this series.

1. The goddess of healing Gula/Ninisina/Baba, etc., to whom the balag im-ma-al-(la) gù dé-dé was no doubt originally addressed, is reckoned in this text as one of the goddesses identified with Innin/Ištar.

2. Cohen, *CLAM* 2, pp. 612–15, b +120ff. M. E. Cohen treated the balag composition im-ma-al-(la) gù dé-dé in *CLAM* 2, pp. 604–36. See Black, "Sumerian Balag Compositions," p. 51 no. 37, and Borger, "Schlüssel zu M. E. Cohen, *CLAM*," pp. 35–36.

6.

MMA 86.11.279

Plate 11

H. 69 mm W. 35 mm Th. 22 mm

Balag

Seleucid or Arsacid period (Babylon)

Obverse

- | | |
|--|-----------|
| 1'. égi ¹ ga[šan . . . | |
| 2'. égi gašan é-tù[r-kalam-ma . . . | |
| 3'. égi gašan Tin-tir ^{ki} [. . . | |
| 4'. égi gašan Ki-bal-maš-[d]á ^{ki} [. . . | |
| 5'. égi gašan ki-tuš ¹ [kir ₄ ¹]-zal-l[a(?)(-) . . . | |
| 6'. égi gašan Ki ^š ki [. . . | |
| 7'. égi gašan é-dub-ba [. . . | |
| 8'. égi mu-gig-an-na [. . . | |
| 9'. égi amalu an-na [. . . | |
| 10'. égi an al-dúb ki sìg | x [. . . |
| 11'. égi na-ám é-zu-šè | x [. . . |
| 12'. égi na-ám úru-zu-šè | x [. . . |

- 13'. [š]e-eb úru gù dé [. . .]
 14'. [še-e]b é gù dé [. . .]
 15'. [. . .] x-šè gù dé [. . .]
 16'. [. . .] x ga úru-šè gù dé [. . .]
 17'. [x (x) i]m-ma-al-la gù d[é] . . .
 18'. [. . .] x x [. . .]
 (rest of obverse broken)

Reverse

- 1'. [x lÍl-lÍ]á(?) -aš(?) gaš[an(?)] 'É' x x x [...]

2'. 'é(?) lÍl¹-lá-aš ki é lÍl-lá-aš d[a(?) ...]

3'. [SU]HÚŠ(?) UD kur-ra-ta sa [...]

4'. dúr pa-rim₄-ma n[am-mi-DU (?)]

5'. dím-ma nu-un-zu-a n[am-mi-DU (?)]

6'. kur-kur nigin-na dúr-[ra nam-mi-DU (?)]

7'. gašan kur-kur-ra (erasure) du₅-mu an-na(?) ...

8'. ki-ùr ki-gal-la dúr-[ra (empty)]

9'. ama-gal ^dNin-<lÍl>-le du₅-mu ...

10'. é-gal Kéš^{ki}-e dúr-[ra (empty)]

11'. ni[n₍₉₎-g]al ^dMu-ul-lÍl-lá du₅-[mu ...]

12'. [é-mah Ad]ab^{ki}-ke₄ dúr-[ra (empty)]

13'. [é ki-sí-ga]-ke₄ d[u₅-mu ...]

14'. [...] x [...] (remainder broken)

Translation

Obverse

- 1'. The princess, the la[dy of . . .
 - 2'. the princess, the lady of Etu[rkalamma . . .
 - 3'. the princess, the lady of Tintir (Babylon) [. . .
 - 4'. the princess, the lady of Kibalmašda [. . .
 - 5'. the princess, the lady of the domicile of splendor [. . .
 - 6'. the princess, the lady of Kiš [. . .
 - 7'. the princess, the lady of Edubba [. . .
 - 8'. the princess, the hierodule of heaven [. . .
 - 9'. the princess, the goddess of heaven [. . .
 - 10'. The princess causes heaven to tremble (and) shakes the earth. . . [. . .
 - 11'. Princess, because of your house . . . [. . .
 - 12'. princess, because of your city . . . [. . .
 - 13'. Concerning the [brick]work of(?) the city the shouting [. . .

- 14'. concerning the [brickwo]rk of(?) the house the shouting [...]
15'. because of [.....] . . . the shouting [...],
16'. because of [.....] . . . and the city the shouting [...].
17'. [the princess(?), the c]ow [...] the shouting [...]
18'. [...] . . . [...]
(rest of obverse broken)

Reverse

Notes

Obverse

- 2': For Eturkalamma, Ištar's shrine in Esagil in Babylon, see George, *House Most High*, p. 151 no. 1117.

4': Innni / Ištar was worshipped in the city of Kibalmašda in Northern Babylonia (see D. O. Edzard, "Kibalmašda," *RLA* 5 [1972–75], pp. 586–87).

7': For the reading é-dub-ba, not é-kišib-ba (Cohen, *CLAM* 1, 2 passim), see Maul, "Wenn der Held," p. 321.

13'ff.: Probably the refrain was: "(Because of . . .), she (i.e., the goddess) cannot suppress her lament."

Reverse

- 7': The refrain should perhaps be restored in ll. 7', 9', 11', and 13' as du₅-mu an-na (...) from Langdon, *BL* 175:obv. 6' (gašan-sag du₅-mu an-na dur-ra[...]).

12': ke₄ is written over an erasure.

No. 7

Balag: a-še-er gi₆-ta, to Innin / Ishtar*Introduction*

This tablet has been restored from three Metropolitan Museum fragments (MMA 86.11.286A + 86.11.286B + 86.11.529) and a fragment in the Vorderasiatisches Museum, Berlin (*SBH* 63 = VAT 210). The drawings on page 58 indicate how the pieces fit together.¹ When complete this tablet contained the whole of the fourth and last section (*nishu*) of the balag composition a-še-er gi₆-ta, addressed to the goddess Innin / Ishtar. Another exemplar of this *nishu* (*SBH* 54), as well as a fragment of the second *nishu* (*SBH* 31) and another of the third *nishu* (*SBH* 27),² survive from the library of the Nanna-ù-tu family. The balag a-še-er gi₆-ta was treated by Black, “A-še-er Gi₆-ta, a Balag of Inana,” in *Acta Sum.* 7 (1985), pp. 11–87, and by M. E. Cohen in *CLAM* 2, pp. 704–25.³ The lines preserved in MMA 86.11.286+ correspond to ll. 304–49 in Black’s edition and ll. b+212–b+256 in Cohen’s edition. This tablet contains a lament by the goddess Innin / Ishtar over the destruction of her cities and shrines (ll. 1’–20’). The following section describes the grief of the goddess (ll. 21’–23’) and the effect of the “woeful fate” of the cities and the temple (rev. 1–5) on the people.⁴ A lament in first-person singular follows, in which the goddess (now under the name Nin-MAR.KI) contrasts her present humiliation with her previous power.⁵ The narrative of the goddess’s humiliation shows striking parallels with the fate of the goddess Geštinanna in the myth “Inanna’s Descent.”⁶ As is the case in the myth “Inanna’s Descent,” our text mentions demons, who menace and bind the goddess (rev. 5). The lament of the goddess in ll. 7–14 (and also in l. 5) certainly alludes to a familiar and well-known mythical episode.

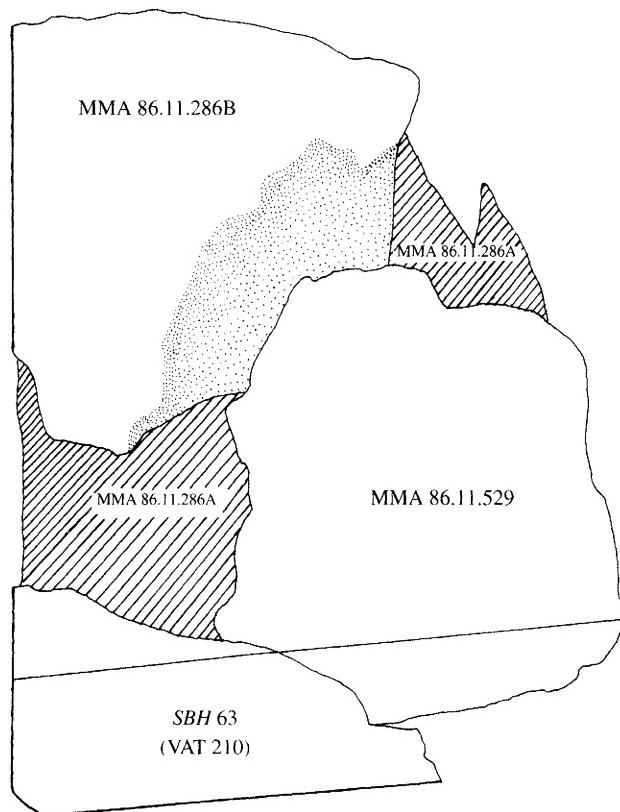
1. A copy of the fragment *SBH* 63 is not included here. The passages taken from this fragment (l. 18’–l. 3) have been underlined in the transliteration.
2. In the colophon (probably inadvertently) written [*nis*]-*hi* 2-ú a-še-er gi₆-ta (*SBH* 27:rev. 9).
3. Cf. Black, “Sumerian *Balag* Compositions,” p. 53 no. 44, and Borger, “Schüssel zu M. E. Cohen, CLAM,” pp. 37–38.
4. See 1. 1.
5. Cf. the refrain *ḥúb-gaz kur-ra-mèn* in ll. rev. 7–8.
6. Cf. W. R. Sladek, *Inanna’s Descent to the Netherworld*, PhD dissertation, Johns Hopkins University (Baltimore, 1974).

7.

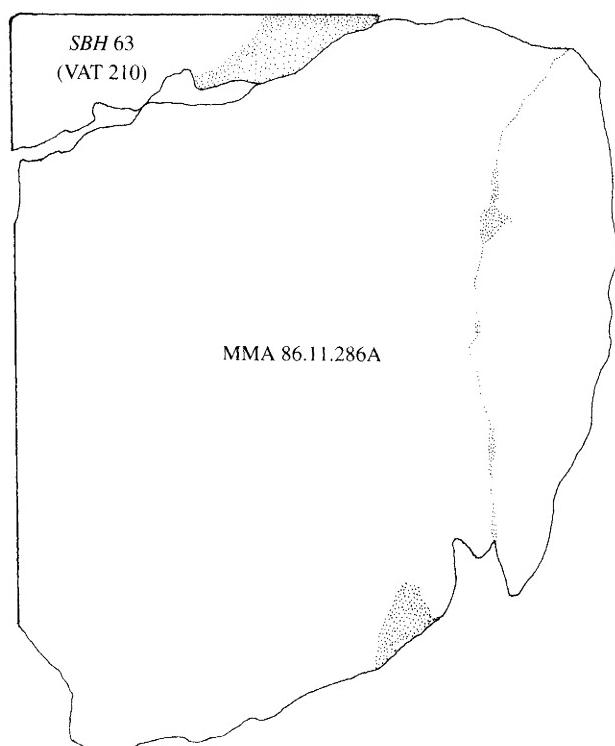
MMA 86.11.286A + MMA 86.11.286B +
MMA 86.11.529 + *SBH* 63 (VAT 210)
Plates 12, 13
H. 94 mm W. 82 mm Th. 25 mm

Balag: a-še-er gi₆-ta, to Innin / Ishtar
Seleucid or Arsacid period (Babylon)

Obverse



Reverse



Obverse

1'. é zi-m[u]	[é-mah-ti-la-mu]
2'. é zi-mu	[é-te-me-en-an-ki-mu]
3'. é zi-mu	'é ¹ -d[àra-an-na-mu]
4'. é zi-mu	še-eb [Unug ^{ki} -ga-mu]
5'. é zi-mu	èš 'é ¹ -[an-na-mu]
6'. é zi-mu	[é)-gi ₆ -pàr-imin-na-mu]
7'. é zi-m[u]	[še-eb Zabalam ^{ki} -mu]
8'. é zi-[mu]	[Hur-sag-kalam-ma ^{ki} -mu]
9'. é z[i-mu]	[é-tùr-kalam-ma-mu]
10'. é z[i-mu]	'tùr gul ¹ -[gul-la-mu]
11'. é [zi-m]u	amaš bu- ¹ bu-ra ¹ -[mu]
12'. é [zi-m]u	ug ₅ -ga-gin ₇ ti[l-la]
13'. dam-mu m[u-un]-gúr	dumu-mu mu-un-[gúr]
14'. [dum]u-mu m[u-un]-gúr	dam-mu mu-un-[gúr]
15'. [mu-un-gur ₁₁ -mu gil-s]a-a-mu	til-l[a]
16'. [ám kar-kar-ra-m]u	ug ₅ -ga-gin ₇ til-l[a]
17'. [tùr in-gu]l	amaš in-b[u]
18'. [úru ki-sikil-b]i	nu-ḥúl-lu-b[i]
19'. [úru guruš-b]i	nu-li-bi-b[i]
20'. [EN-ra umun-bi nu-h]úl-lu-bi : EN-ra gašan-bi hi-li-bi nu-t[il-la-bi]	

21'. [áb-e edin-na-na] ér gig mu-un-ma-m[a]
 [lit-tum ana bítí(É)-šú m]ar-ší-iš i-bak-k[i]
 22'. [edin-na-na áb-e edin-na-na] [ér gig]
 23'. [mu-gig an-na-ke₄ edin-na-na ér : gašan 6(?) MU^{meš} GU₄.UD^{meš}. . .

Reverse

9. a sig-ta di-di gi₄-in-bi-mèn húb-
(erasure) šá šap-liš il-la-ku a-mat-su ana-ku mu-di-ik-ti (empty)
10. igi-nim-ta di-da gi₄-in-bi-mèn húb-
šá e-liš il-la-ku a-mat-su ana-ku (empty)
11. gišbanšur KAŠ₄(!) (tablet: KÁ)-e-ne-mèn ka-gub ka'-nag¹-g[á-mèn húb- (empty)]
pa-áš-šur u(over: bar)-bar(over: ti)-ti ana-ku ip-te-en m[a-a-ti ana-ku]
12. [kù G]ašan-MAR.KI-mèn ka-gub ka-nag-gá-[mèn húb- (empty)]
[e]l-le-tum ⁴Nin-MA[R].K[I] [ana-ku ip-te-en ma-a-ti ana-ku]
13. {si}g-¹ta DU¹ [sig-ta mu-gi₄-gi₄ húb- (empty)]
(remainder of reverse broken)
14. [igi-nim-ta DU nim-ta mu-gi₄-gi₄ húb-]

Translation

Obverse

- 1'. M[y] faithful house, [my Emahtila],
 - 2'. my faithful house, [my Etemenanki],
 - 3'. my faithful house, [my Edara²anna],
 - 4'. my faithful house, [my] brickwork [of Uruk],
 - 5'. my faithful house, [my] shrine E[anna],
 - 6'. my faithful house, [my (E)gipariminna],
 - 7'. m[y] faithful house, [my brickwork of Zabalam],
 - 8'. [my] faithful house, [my Hursagkalamma].
 - 9'. [my faith]ful house, [my Eturkalamma],
 - 10'. [my faith]ful house, [my] destro[yed] cattle pen,
 - 11'. [m]y [faithful] house, [my] uprooted sheepfold,
 - 12'. [m]y [faithful] house has been brou[ght to an end] like a dead man.
 - 13'. He (i.e., the enemy) has humbled my [spouse]; he has [humbled] my child.
 - 14'. He has humbled my [chil]d; he has [humbled] my spouse.
 - 15'. [My property] (and) my [jew]elry have been brought to an end.
 - 16'. M[y plundered goods] have been brought to an end like a dead man.
 - 17'. [He has destro]yed [the cattle pen]; he has up[rooted] the sheepfold.
 - 18'. [The city wh]ose [young girls] will not be happy anymore,
 - 19'. [the city wh]ose [young men] will not rejoice anymore,
 - 20'. [. its lord who will not be] happy anymore, : its lady whose excitement(?) will not be
[consummated].
-
- 21'. [The cow] sheds bitter tears [in her steppe].
Akk.: [The cow] crie[s b]itterly [because of her house].
 - 22'. [In its steppe, the cow (sheds) bitter tears in her steppe.]

23'. {The hierodule of heaven (sheds bitter) tears in her steppe : the lady of . . . (sheds bitter tears in her steppe); six(?) lines skipped . . .]

Reverse

1. The man who knows [Eanna, the city of the] bit[ter fate], will not be [happy anymore].
Akk.: The one who knows [the house that has (such) a bit]ter [fate] will not be happy anymore.
2. The man who knows [the city of the sea]ring [fate] (will not be happy anymore).
Akk.: (The one who knows will not be happy) with the city of the sea[ring] fate.
3. The man who knows its [ser]vant's groaning (will not be happy anymore).
Akk.: (The one who knows will not be happy) with the (city?) whose servants are moaning.
4. The man who knows that holy Ninmar has disappeared will not be happy anymore.
Akk.: (The one who knows will not be happy) with the disappearance of holy Ninmar.
5. The man [who knows] the (string of) beads of the scarf on her breast, seized by the demons (will not be happy anymore).
Akk.: (The one who knows will not be happy) with the string of beads(?) of the scarf on her breast, which the *gallû* demons bound.
6. You are weeping, my lady. She wails bitterly a lament:
Akk.: The lady cries. With a (loud) voice she laments bitterly:
7. "My father built (Akk.: me) a house at the 'breast of the waters'—me, the one who smites the mountains.
8. Enlil built (me) a house at the 'breast of the waters'—(me), the one who smites (the mountains).
9. Alas, (and now) I am the maid-servant of the one who walks downstream—(I), the one who smites (the mountains).
10. (Now) I am the maid-servant of the one who walks upstream—(I), the one who smites (the mountains).
11. (Now) I am the table of the foreigners; [(now) I am] the food rations of the land (of Sumer)—[(I), the one who smites (the mountains)].
12. I am the holy Ninmar, (and now) [I am] the food rations of the land (of Sumer)—[(I), the one who smites (the mountains)].
13. The one who wa[lks downstream smites me downstream,—(me), the one who smites (the mountains)].
(remainder of reverse broken)
14. [The one who goes upstream smites me upstream,—(me), the one who smites (the mountains).]

Notes

Obverse

1'-3': The temples mentioned in ll. 2' and 3' were situated in Babylon. Etemenanki was the name of the ziggurat in Babylon; Edara'anna was the cella of Zarpānītum in Esagil at Babylon (see George, *House Most High*, p. 74 no. 145, and idem, "The Bricks of Esagil," *Iraq* 57 [1995], p. 186). These temples and the cella of Nabû in the Ezida temple at Borsippa are mentioned by name, since the grieving goddess, Innin / Ištar in

her various forms, was considered the consort of Nabû and Marduk, as well as the mistress of the temples and shrines of these gods.

- 4'-6': Lines 4'-6' lament over the destruction in Uruk of the main cult center for Innnin / Ištar, including her Eanna temple and its temple tower, Egipariminna, by an unnamed enemy. The order of Innnin / Ištar shrines—Uruk, Zabalam, and Hursagkalamma (ll. 4'-8')—is the same in many Emesal litanies, either addressed to this goddess or recited by her (see also e.g., Maul, “*Herzberuhigungsklagen*,” pp. 283–84, Esh. nos. 70–71, 8’–11’).
- 8': The line is restored from *SBH* 54:obv. 36. In other forms of the text we find še-eb Ḫur-sag-kalam-ma-mu (see Black, “A-še-er Gi₆-ta,” pp. 28, 311).
- 9': Eturkalamma is the name of the Innnin / Ištar temple in Babylon (see George, *House Most High*, p. 151, no. 1117).
- 20': The correct reading and the meaning of EN-ra are unknown. Black, “A-še-er Gi₆-ta,” p. 57, has suggested that EN-ra may have the same meaning as èn-šè = *adi mati*, “until when(?)” “how long(?)”; èn-šè varies with en-šè in the *SBH* texts (see *SBH* 47:rev. 3).
- 21': “Cow” is an epithet for the goddess Innnin. The Sumerian version preserves the metaphor and calls the realm of the goddess edin, “steppe,” while the Akkadian version adheres to reality by translating edin as *bitu*, “house,” “temple.” Neither the epithet edin nor áb, “cow,” should be taken literally in the Sumerian version (for a different opinion see Black, “A-še-er Gi₆-ta,” p. 58).
- 23': The scribe did not copy out part of the litany between l. 23' and the following l. rev. 1 just before the refrain edin-na-na ér, etc., because the standard epithets of the goddess Innnin to be expected there were in a fixed order familiar to every *kalû* singer.

6(?) MU^{meš} GU₄.UD^{meš} is restored from the duplicate *SBH* 54:rev. 54. The *SBH* tablet then (in somewhat smaller script) indicates that five lines have been “skipped,” but, as opposed to our text, it includes the last line of the litany (*SBH* 54:rev. 55). However, the restoration of the line is uncertain, since there is another version of the litany, longer than *SBH* 54, namely CT 42, 20:rev. 5–10.

Reverse

- 1: Neither this line nor *SBH* 54:obv. 56 (there: nu-húl-l[e]) has sufficient space for the reading suggested by M. E. Cohen in *CLAM* 2, p. 716, b+244: nu-húl-le-dè. First person singular *ahaddu* makes no sense. *a-* here is an error for *i-*. The duplicate *SBH* 54:rev. 57 has *i-had-du* as expected.
- 2: The duplicate *SBH* 54:obv. 59 has *hum-mu-ta-a-ti*, contrary to the copy by G. Reisner, *SBH*, p. 101. There is not sufficient space on the MMA tablet for the following: šá ¹*i-du*¹-[ū].
- 3: For mur-(mur) meaning “scream,” “lament,” compare *MSL* 14, p. 420, 261–65. Cohen’s suggested reading *sur-ru-ha[t]* (*CLAM* 2, p. 716) is not grammatically sustainable. (This reading can only stem from the present tablet. However, this text is not included in the list of copies of the balag a-še-er gi₆-ta in *CLAM* 2, p. 704.)
- 4: For gašan/Nin-MAR.KI compare R. M. Whiting, “The Reading of the Divine Name ^dNin-MAR.KI,” *ZA* 75 (1985), pp. 1–3. According to Whiting it should be read Gašan/Nin-mark^{ki}. The subjunctive *iḥliqi* instead of *iḥliqu* (as in *SBH* 54:rev. 2) is not unusual in Late Babylonian (see e.g., A. Schollmeyer, *Sumerisch-babylonische Hymnen und Gebete an Šamaš*, Studien zur Geschichte und Kultur des Altertums 1, Ergänzungsband [Paderborn, 1912], p. 139, VAT 5:obv. 5–6: (šá) . . . qibissu lā uš-¹*te*¹-*pe-e-li*).

- 6: Neither Cohen (*CLAM* 2, p. 717) nor Black, “A-še-er Gi₆-ta,” pp. 29 and 32, interprets the second half of the line correctly. It is preserved in CT 42, 20 rev. 16 (= A) and in *SBH* 54:rev. 5–6 (= B, collated):

A.	... gig-ga ad-da-àm(!) (copy: -A-HAL)	ba-da-DU-DU-ér-ér
B.	... gig-ga ad-da-àm(!)	ba-' ¹ da ¹ -š[a ₄ -ša ₄]
... <i>ina rig-gim mar-ṣi-iš i-¹na(!)¹-as-su-u[s(!)]</i>		

The compound verb *ad -ša₄* = *nasāsu* appears here in its expanded form *ad-da-àm -ša₄*. For the reading DU = *er₁₀*, suggested by the gloss in CT 42, 20, see P. Steinkeller, “Notes on Sumerian Plural Verbs,” *OrNS* 48 (1979), pp. 61–62 and p. 66.

- 7–8: Ll. 7 and 8 clearly have *ba-an-^{du}dù*. The undoubtedly better reading for the context, *ma-an-dù* (as in *SBH* 54:rev. 7 and 9 [there erroneously: *ma-an-NI*]), can be excluded in MMA 86.11.286A:rev. 7–8 for epigraphical reasons.
- 11: For *ka-gub* = *patānu*, “to eat” and *naptanu*, “meal” see M. Civil, “The ‘Message of Lú-dingir-ra to his Mother’ and a group of Akkado-Hittite ‘Proverbs,’” *JNES* 23 (1964), p. 9 with n. 14, and H. Steible and H. Behrens, *Die altsumerischen Bau- und Weihinschriften*, FAOS 5/1 (Wiesbaden, 1982), p. 304, 17, and idem FAOS 5/2, p. 153. Collation of *SBH* 54:rev. 15 establishes that also in this tablet the correct reading is *ip-te-en ma-a-tum ana-ku*.

No. 8

Balag: a abzu-mu

Introduction

As the drawings on page 65 show,¹ the tablet fragment MMA 86.11.346 joins *SBH* 60 (VAT 370[!]) and *SBH* 84 (VAT 1831) tightly. Even though these joins re-create an impressive text with a total of sixty (double) lines, approximately one-third of the tablet is still missing. MMA 86.11.346 joined with *SBH* 60 and *SBH* 84 does not belong to the balag x é-mu, listed in the catalogue IV R² 53+:col. i 48, as previously assumed.² In the colophon of the tablet (*SBH* 60:rev. 37) we read instead: [x *nishu* a a]bzmu NU.AL.TIL *ana zamāru(DU₁₂)*[“], “[xth section of a-a]bzmu, not finished. For singing.” There is no balag with the title “Ah, my abzu” in the catalogue IV R² 53+.³ It was, however, already known from the catalogue published by D. D. Luckenbill, “A Neo-Babylonian Catalogue of Hymns,” *AJSL* 26 (1909/10), p. 28, no. 14. The first tablet from this composition was published recently by Jan van Dijk with A. Falkenstein’s copy, in VS 24 as text no. 24. The second tablet of the balag is still unknown (see the catch-line on VS 24, 24:rev. 10’). *SBH* 32 probably belongs to the same balag composition.⁴

It remains unclear whether Marduk-zēr(a)-ibni or his brother Bēl-apla-iddin was the scribe of the tablet MMA 86.11.346 (+ *SBH* 60 + *SBH* 84). The tablet was written in 131 or 130 B.C. (= 117 or 118 Arsacid Era) by one of Ea-balāssu-iqbi’s two sons (see *SBH*, p. 115 no. 60:rev. 39, and J. Oelsner, “Randbemerkungen zur arsakidischen Geschichte anhand von babylonischen Keilschrifttexten,” *AoF* 3 [1975] pp. 31–32 and p. 45).⁵

The beginning of the tablet is preserved on *SBH* 60; nine double lines on that piece precede MMA 86.11.346. These lines describe how the life-giving water was absent from the temple of Eridu—the É-engur-ra, the center of the

*apsū*⁶—and from the canals. It says in the text that the openings to the canals were “blocked with clay, like a canal cut off (Akk.: cursed) by Enki.”⁷ Thorny brush grew in the canals, which had fallen into disrepair and neglect. MMA 86.11.346 describes the further consequences of the dwindling water supply for both man and animal in the city of Eridu. This part of the prayer ends with a plea addressed to Enki(?) to turn again to his city of Eridu with favor (obv. 23). Following a large break in the text is a description of the goddess of the city suffering and grieving over the disaster that has befallen her temple and her city (rev. ll. 7’–27’), as in many other balag compositions. The next tablet, cited in the catch-line (*SBH* 60:rev. 35–36), is as yet unknown. *SBH* 60 was treated by M. Cohen in *CLAM* 2, pp. 637–41, and by M. Green in Eridu in Sumerian Literature, PhD dissertation, University of Chicago (Chicago, 1975), pp. 368–74.

1. The passages from *SBH* 60 and *SBH* 84 are underlined in the transliteration.
2. Cf. Black, “Sumerian *Balag* Compositions,” p. 51 no. 38, and Cohen, *CLAM* 2, pp. 637–41.
3. The colophon of this tablet expressly indicates that the catalogue is incomplete.
4. Cf. Black, “Sumerian *Balag* Compositions,” p. 51.
5. Cf. also the introduction to text No. 12, p. 89.
6. The Sumerian version of the first line of the text describes the temple as “the house filled with water” (é a sa₅-ga-ri) (cf. also *SBH* 60:obv. 7). The Akkadian version of the line renders this description of the É-engur-ra imprecisely as “the house that is standing in water” (*bītu ša ina mē izzazzu*).
7. See *SBH* 60:obv. 11–12.

8.

MMA 86.11.346 + *SBH* 60 (VAT 370[!]) +

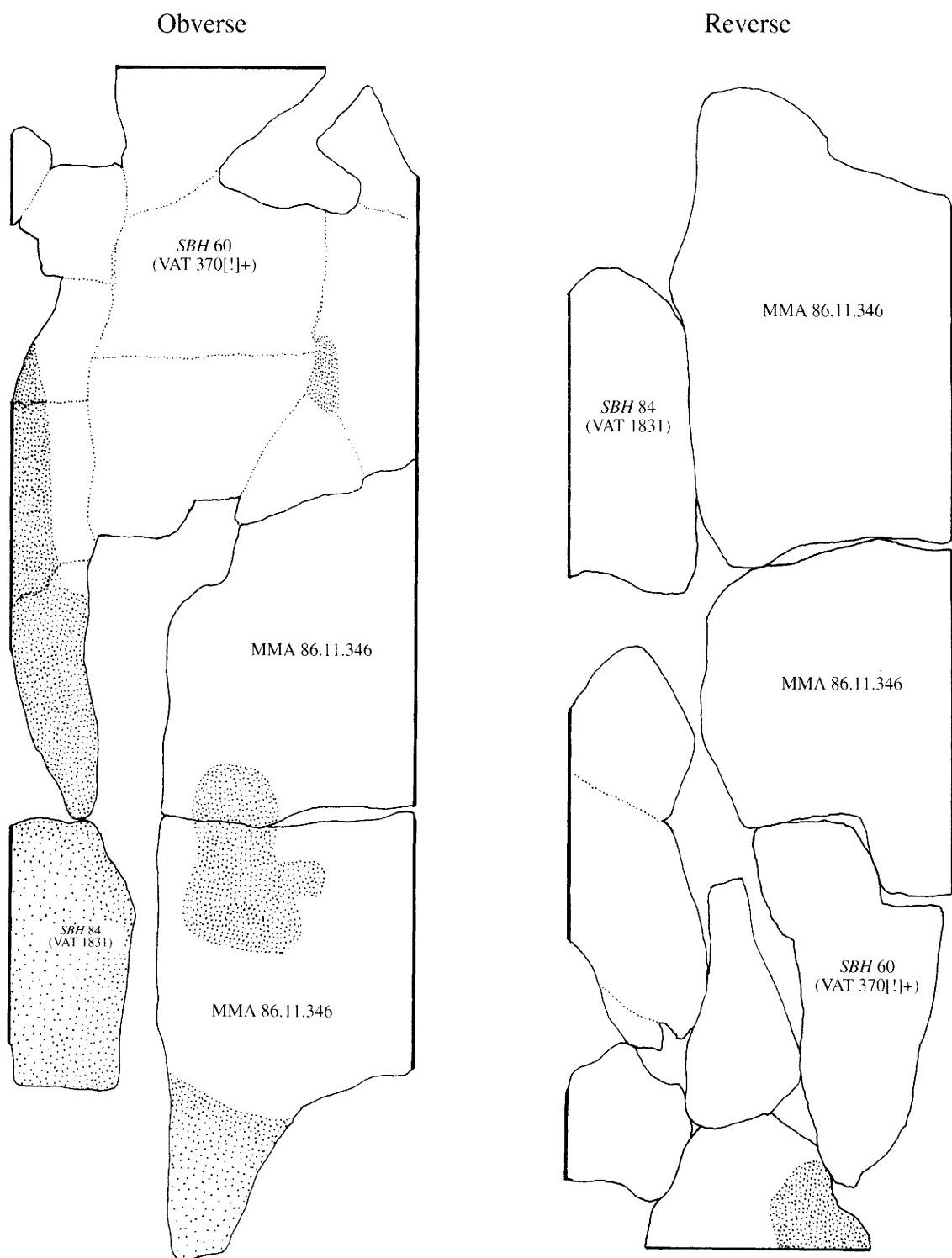
SBH 84 (VAT 1831)

Plates 14, 15

H. 130 mm W. 50 mm Th. 29 mm

Obverse

		Balag: a abzu-mu
10.	1'. [gīš <u>tir-tir-bi</u> ba-su ₈ -su ₈ -ge-eš] 2'. [<u>qí-šá-tu-šú it-tar-(x)</u>] x	[pú gīškiri ₆]-bi ba-na-x-eš ¹ šip-pa-tu-šú i-tab-la
11.	3'. [mu-nim-mar-bi x x] x 4'. [<u>gi-šim-mar-šú . . .</u>]-x-at	i-bí-bi-ta ba-šú ^A bu-ú-pa-ni-šú sah-pat
12.	5'. [x (x) <u>x x x</u> ba-an-d]a-ri-a 6'. [x x <u>x x x</u> (x) i]t-te-su-ú	su ₈ -su ₈ -su ₈ -A/MIN ga-bi _A ba-da-šár-ra ^A qar-ba-tu-šú is-si-qa
13.	7'. [x (x) <u>x-bi</u> i(?) <u>x</u>] ba-hul 8'. [<u>i-na(?) me-re-ši</u>]i-šú id-ra-an-nu	MUL-GÁN-NE _E ba-an-mú ^A lem-niš a-ši
14.	9'. [x (x) <u>x šu a x</u>] x us(?) us 10'. [x (x) <u>x-šú uq</u>]-qu-uq	máš-anše-bi ba-til bu-ul-šú it-tag-mar



Reverse

1'. 1'.	[.....] x		[...]
2'.	[.....] x re-e-mi-šú	x [...]	[...]
2'. 3'.	[.....]-ke ₄	A	gù úr[u-a mi-ni-fb-bé E]
4'.	[.....]		ši-si-i[t āli(URU) i-šá-as-si]
3'. 5'.	[.....-ke] ₄ (?)	A	gù úru-[a (empty)]
4'. 6'.	[Úru-zí-ib-ba ^{ki} k]jí zí-ib-ba	A	ul ₄ -ul ₄ -la-bi x [...]
7'.	[ina(?)] Eri-du ₁₀ ašri f]a-a-bi		ur-ru-ḥi-iš it-x [...]
5'. 8'.	[.....i-lu g]ig-ga ^{II} u ₄ im-mu-da-an-zal EEE i-' ^I lu-u i-lu ^I -[u] 'an ^I -[nu-u]		
6'. 9'.	[ma-a a-ba u ₄ me-n]a-gin ₇		ma-a-a di-di-in A
7'. 10'.	[áb-gin ₇ Úru-zí-ib] ^{ki} -ba-šè E A		gù mu-un-dúb-dúb-bé E
11'.	[ki- <u>ma</u> lit-tum an]a Eri-du ₁₀		iš-ta-na-as-si
8'. 12'.	[é lá(l)(?)-šè áb-gin ₇ Úr]u-zí-ib ^{ki} -ba-šè		gù mu-un-dúb-dúb-bé
13'.	[ana bīti(É) ša(?)-qí-i k]i-ma lit-tum ana Eri-du ₁₀ iš-ta-na-as-si		
9'. 14'.	[ama é-ma]ḥ	A	^d Dam-gal-nun-na-ke ₄ E
15'.	[um-mi É.M]IN		^d MIN
10'. 16'.	[é-gi ₄ -a engur-r]a	A	^d Pap-nun-an-ki-ke ₄ E
17'.	[kal-lat ap-si-i]		^d Zar-pa-ni-tú
11'. 18'.	[^A] [^d Namma ama gal-r]a		engur-ra-ke ₄ E
19'.	[^d MIN um-mi rabitu(GAL ^I) ^{II}]		šá ap-si-i
12'. 20'.	[^A] [^d Nanše dumu sag]	(erased E)	Úru-zí-ib ^{ki} -ba-ke ₄ E
21'.	[^d MIN mar-tum reš-t]i-tum		šá 'Eri ^I -du ₁₀
13'. 22'.	[^{ŠU ŠEM} ₄ DAB][nu-nus sa ₆ -ga]	A	Gašan-'gi ^I -kug-ga-ke ₄ E
23'.	[sin-niš-tum da-mi-i]q-tum	(erased A)	^d [N]in-gal
14'. 24'.	[] [<u>é-gi₄-a é-sag-í</u>]l-la	A	dumu-munus ^d Uraš-a-ke ₄ E
25'.	[kal-lat É.MI]N		mar-tum ^d MIN
15'. 26'.	[udug é-a]	A	^d Hé-dim-me-kug-ga-ke ₄ E
27'.	[ra-bi-iš bīti(É)]		^d MIN

16'. 28'. [áb-gin ₇ tür-ba]		gù mu-un-dúb-dúb-bé ^E
29'. [<u>ki-ma ar-hi</u> ina tarbašiša]		iš-ta-na-as-si
17'. 30'. [x x-a-gin ₇ amaš-ba]		gù 'gig ¹ -[g]a-'bi mi-ni-šb ¹ -[bé]
31'. [<u>kīma immerti/lahri(?) ina supūriša</u>]		[mar-ṣ]i-iš i-šá-as-si
18'. 32'. [áb amar-bi-gin ₇ tar-r]a(?)		gù arḥuš-a mi-ni-šb-bé ^E
33'. [<u>ki-ma ar-hi šá bur</u>]-šá par-su		ši-si-it re-e-mi i-šá-as-si
19'. 34'. [<u>é zi</u> (!)(tablet: NAM) gul-gul-a]-na	A E	ér gig mu-un-še ₈ -še ₈ ^A
35'. [<u>ana bīti</u> (É)-šá ki-i-ni šá u]b-bu-tu		mar-ṣi-iš i-bak-ki
20'. 36'. [<u>úru zi</u> (!)(tablet: NAM) ḥul-ḥul]-r'a ¹ -na	A	še _E ḥam-mi-ni-šb-ša ₄ -ša ₄ ^A
37'. [<u>ana ālī</u> (URU)-šá ki-i-ni š]á šul-pu-tu		i-dam-mu-um
21'. 38'. [mu-un-GA ir-ra-a-n]j-i-šē	A	te ^E mu-un-ur ₅ -ur ₅ -re ^U
39'. [<u>ana ma-ak-ku-ri-šá</u>] šá iš-šal-la		uq-ṭa-ad-da-ad
22'. 40'. [<u>gil-sa</u> íl-íl-]a(?)-ni-šē	A	ur ₄ -ra mu-un-i-re ^A
41'. [<u>ana šu-kut-ti-šú</u> šá iz]-zab-lu		ub-ta-aq-qa-am
23'. 42'. [<u>ám kar-kar-ra-n</u>]i-šē	A	gaba šu mu-un-sìg-ge ^A
43'. [<u>ana bu-še-e-šá</u> šá im-maš-?]u-ú		i-rat-su i-maḥ-ha-aṣ
24'. 44'. [<u>un ḥub-ḥub-ba-ni-šj</u> è	A	i-lu ^U mu-un-na-ab-bé ^E
45'. [<u>ana ni-ši-šá</u> šá ik-kam-r]a		qu-bé-e i-qab-bi
25'. 46'. [<u>ka-nag til-til-la-ni-šj</u> è	^E A	'an-na mu-un ¹ -dúb-bé ^{'A'}
47'. [<u>ana ma-ti-šá</u> šá iggamru]		[šamē ú]-rab-bi
26'. 48'. [<u>ù nu-mu-un-na-ku-ku</u>	A U	ù nu-mu-u]n-na-ku-ku ^U
49'. [<u>ul i-na-al</u>		ul(!)(tablet: MI) i-ṣal-lal]
27'. 50'. [<u>ù nu-mu-un-sed-dè</u>	A U	ù nu-mu-un-n]a-te-en-te-en ^E
52'. [<u>ul i-na-ah</u>		ul i-pa-áš-ša]h
(in SBH 60 seven more lines follow)		

Translation

Obverse

- 7'. [Like a cow] she continuously utters cries because of [Eridu].
 Akk.: [Like a cow] she continuously cries [because] of Eridu.
- 8'. [Because of the lofty house], she continuously utters cries [like a cow] because of [Er]idu.
 Akk.: [Because of the lofty house] she continuously cries [I]like a cow because of Eridu.
- 9'. [The mother of the Emaj^h, Damgalnunna,
- 10'. [the daughter-in-law of the Engur], Papnunanki,
 Akk.: [the daughter-in-law of the *apsû*], Zarpānītu,
- 11'. [Nammu, the great mother of the Engur/*apsû*,
- 12'. [Nanše, the firstborn child] of Eridu,
 Akk.: [Nanše, the first]born daughter of Eridu,
- 13'. [the goodly woman], Ningikuga,
 Akk.: the good[ly woman], Ningal,
- 14'. [the daughter-in-law of Esagij], the daughter of Uraš,
- 15'. [the genie of the house], Hedimmekuga
- 16'. continuously utters cries [in her cattle pen like a cow].
 Akk.: continuously cries [in her cattle pen like a cow].
- 17'. [Like a ewe(?)] she bitterly utte[rs] cries [in her sheepfold].
 Akk.: [Like a ewe(?)] she [bitter]ly cries [in her sheepfold].
- 18'. [Like a cow whose ca]lf is separated, she utters cries (to get) mercy.
- 19'. In her [faithful house, which has been destroyed], she sheds bitter tears.
 Akk.: [Over her faithful house, which has been] destroyed, she wails bitterly.
- 20'. In her [faithful city, which has been defiled], she mourns.
 Akk.: [Over her faithful city, wh]ich has been defiled, she mourns.
- 21'. Because of he[r property, which has been plundered], she casts down (her) face (lit.: (her) cheeks).
 Akk.: [Because of her property], which has been plundered, she bows down.
- 22'. Because of her [jewelry, which was car]ried away, she . . .
 Akk.: [Because of her jewelry, which] was carried away, she tears out her hair.
- 23'. Bec[ause of her goods, which were tak]en, she beats her breast.
- 24'. Bec[ause of her people, whose bodies have been heaped up], she utters wails.
- 25'. Be[cause of her land, which has been annihilated], she rumbles in the heaven.
 Akk.: [Because of her land, which has been annihilated, she causes heaven] to quake.
- 26'. [It prevents her from sleeping; it prevents her from] sleeping.
 Akk.: [She cannot lie down; she cannot lie to sleep.]
- 27'. [It prevents her from sleeping peacefully; it prevents her from sleeping] calmly.
 Akk.: [She cannot relax; she cannot calm dow]n.

Notes

Obverse

10: The first nine double-lines are on the joined piece *SBH* 60 (VAT 370[!] +). Some signs from the beginnings of ll. 10–16 are also preserved on *SBH* 60:obv.19–32. The suffix bi refers to the already mentioned city,

Eridu, whose fate is lamented in this text (cf. *SBH* 60:obv. 5–6 and the use of the suffix *bi* in the following lines).

Apparently we have an N-stem of the verb *erû* V, *arû* VII (see *AHw*, pp. 247–48 and *CAD A/2*, p. 317 s.v. *arû* C and *arû* D). Then *sug* corresponds to *sù* = *erû* V, *arû* VII, “to be naked.” In connection with *qištu*, “wood, forest” *erû* V and *arû* VII are used in *SBH* 4:104 and 109. See further *MSL* 16, p. 226, 81–83.

11: See Cohen, *CLAM* 2, p. 621, f+300, for the first half of the line; for the second half of the line see the parallel line in Cohen, *CLAM* 2, p. 608, a+3.

12: With the first half of the line cf. *SBH* 60:obv. 7–8:

7. [é] a gal sa ₅ -ga-ri	A a-e [ba]-a[n-d]a-ri
8. bītu('é') šá ina me-e rabūti(GAL ^{meš}) iz-za-az-zu	mu-ú it- ¹ te ¹ -su-šú

and see further *SBH* 60:obv. 1–4. The translation of *šár*, which usually means “to be abundant,” as *siāqu*, “to become narrow,” is probably not correct.

13: MUL-GÁN-NE has the gloss E under the last sign, so probably the scribe read MUL-GÁN-ne. We know that it should be read MUL-GÁN-pil from an Old Babylonian text with the variant MUL-GÁN-pe-el (see S. N. Kramer, *Lamentation over the Destruction of Ur*, AS 12 [1940], p. 48, l. 272, and A. Falkenstein, review of Kramer, *Lamentation over the Destruction of Ur*, ZA 49 [1950], p. 323 on this line). This plant grew wild when the ground was salinated, as clearly indicated in the Akkadian line that deviates from the Sumerian version here.

16: tag₄-lá is translated as *petû*, “to open,” in *SBH* 43:rev. 14–15 (é [t]ag₄ nam-mi-in-DIŠ [read: -lá] = *bīta* (é) *ip-te-šim-ma*). The two elements of the verb are translated separately in the Akkadian version of the line under discussion: tag₄ is interpreted as *ri-ha-a-tu* (compare CT 17, 21:90 [tag₄ = *rītu*, *rēhtu*, “remainder”]). The Akkadian verbal form remains difficult. We probably have to read *it-ta-áš-ta-a* as the N-stem perfect of *šatû*, “to drink” (W. G. Lambert informs this writer that there is an N-stem of *šatû* in *Enūma eliš* VII, l. 160). It is unlikely that we have the verb *letû*, “to split,” here. Interpreting it as a form of *šātu*, *šētu*, “to be left over,” should be ruled out. In ll. 19' and also 20' there is a form of the sign ZI that looks like NAM.

17: With this line compare Th. J. Meek, *Cuneiform Bilingual Hymns, Prayers and Penitential Psalms*, BA 10/1 (Leipzig, 1913) no. 2, p. 73 (= BA 5/5 no. 20), 1–2.

19: Perhaps to be read: [. . . līl-lá-à]m mu-¹un¹-bu-bu = [. . . ki-ma za-qí-q]í it-¹ta¹-na-aš-rab-bīt (see here CT 16, 1:35–36; CT 17, 1:25–27; and CT 17, 29:5–6).

22: gi₄ should be understood as a variant reading for nigin. The preformative chain is the same for the two verbs and is not repeated. Both verb forms are translated in the Akkadian version.

24: The city of Eridu is no doubt the subject of the sentence. The end of the section of the prayer that begins in l. 24 is preserved on the rev., ll. 1'–5'. Rev. l. 5' is identical with the first line of the section (obv. l. 24).

Reverse

2': Damgalnunna in one of her manifestations is perhaps the subject of the sentence (cf. rev. 9'ff.). L. 2' has been restored from the very similar l. 18'.

4': The restoration of the first half of the line follows *SBH* 60:obv. 5–6.

5': Cf. l. 24. An almost identical gloss, also placed before the line ma-a a-ba u₄ me-na-gin₇, etc., occurs on the tablet MLC 1868 (see Cohen, *CLAM* 2, pp. 809 and 653, b+42); see also the gloss in text No. 5, MMA 86.11.348, 16' (above p. 43). The exact meaning of these glosses cannot yet be understood, but the notation after the gloss: *ana zamāri* (cf. text No. 5:16' and W. G. Lambert, “The Converse Tablet: A Litany with Musical Instructions,”

in H. Goedicke, ed., *Near Eastern Studies in Honor of William Foxwell Albright* [Baltimore, 1971], p. 339) indicates that the gloss was an instruction for the performance of the song.

The fragment published by van Dijk in *Texte aus dem Reš-Heiligtum*, no. 38, is a duplicate to ll. 5'-14'.

- 6': J. Krecher discussed this line in *Kultlyrik*, pp. 192–93. It appears in numerous balags (see Cohen, *CLAM* 1, p. 52, 64; p. 77, b+63; p. 126, 53; p. 131, b+154; p. 255, a+27; p. 327, f+165; *CLAM* 2, p. 424, b+28; p. 443, 60; p. 449, a+204; p. 505, a+68; p. 653, b+43; p. 707, a+41) and in the copies from the first millennium B.C. It is always separated by dividing lines from the preceding as well as the following text. See further Cohen, *CLAM* 1, p. 28. Only two of the texts have an Akkadian translation. They are:

SBH 17:rev. 3–4

[ma-a a-ba] u₄ me-na-gin₇ ma-a-a^A d[i-di-in]
 [anāku man-n]u(?) ki-ma šá u₄-mu ma-ti-ma a-a-iš al-l[a-ak]
 BM 54745 = Cohen, *CLAM* 1, pp. 52, 64
 ma-a a-ba u₄ me-na-gin₇ ma-a-a di-d[i-in]
 ana-k[u] man-nu ki-ma šá u₄-mi ma-ti-ma e-eš [allak]

Here, ma-a is understood as *anāku*, “I.” This interpretation can be confirmed by an Old Babylonian text, BE 30, 1:col. iii 4, which offers the variant gá(?)a instead of ma-a (see Krecher, *Kultlyrik*, p. 193). Whether or not this is the original meaning remains unclear.

- 8': The beginnings of ll. 8'-17' are preserved on *SBH* 84. It is not clear whether *SBH* 84:2' has 'é' lá-šè or perhaps rather 'e lál'-šè (the horizontal wedge is low and the top is broken off). Cf. *SBH* 69:obv. 26–27: lá-(lá) = šaqû, “high,” and also B. Hruška, “Das spätbabylonische Lehrgedicht ‘Inannas Erhöhung,’” *ArOr* 37 (1969), p. 488, l. 23: an-šè -lá = šaqû, Š-stem “to raise.”
- 11': This author cannot explain the meaning of ra in gal-ra. Perhaps the scribe inadvertently took it from the previous line (*aberratio oculi*?).
- 12': The reading Nanše in *SBH* 84:10' (Reisner: TE) is certain from collation of the sign and from the duplicate van Dijk, *Texte aus dem Reš-Heiligtum*, 38:7' (there: AB×[H]A).
- 13': The gloss on the left edge of the tablet is an instruction for the musical accompaniment to the song by the šèm drum. The same gloss occurs in *SBH* 8:obv. 9, *SBH* 9:rev. 6, and *SBH* 23:obv. 14 (not copied by G. Reisner).
- 15': For Hedimmekuga see W. G. Lambert, “Hedimmekuga,” *RLA* 4 (1972–75), p. 244. Hedimmekuga is otherwise known as the daughter of Enki and the daughter of the *apsû*.
- 18': The beginnings of ll. 18'-27' are preserved on *SBH* 60:rev. 1'-19'. The text continues in *SBH* 60:rev. 20'ff. The fragment K 17455 (copy in Cohen, *CLAM* 2, p. 818) written in Assyrian script duplicates ll. 18'-21'.
- 19': For ll. 19'-25' compare S. M. Maul, “Ein Ninurta Eršemma,” *OrNS* 60 (1991), pp. 321–25.
- 20': K 10375 duplicates ll. 20'-26'.
- 22': The meaning of the root ir is unclear. For ur₄ = *baqāmu*, “tear out,” see *AHW*, p. 104 (VAT 10243, 11). The motif of a goddess who from grief and pain over the destruction and plunder of her temple “lets her hair fall loose behind her” so “she can tear out her hair” occurs also in the text of very similar content, Sm 325 (= S. M. Maul, “Ein Ninurta Eršemma,” *OrNS* 60, pp. 324–25).
- 24': The fragment K 17927 duplicates ll. 24'-27'.
- 25': Cf. *SBH* 60:rev. 22–23.
- 27': ù-sed and ù-te-en are no doubt to be considered as patterned after ù-ku. The last en in [ù nu-mu-un-n]a-te-en-te-en is written over an erasure. Seven double-lines, the catch-line, and the colophon follow in *SBH* 60.

No. 9

Balag: Unidentified, to Nergal(?)

Introduction

The fragment MMA 86.11.289 has been lost and is known only from a hand-copy made by Louis F. Hartman in the 1940s.¹ It contains a portion of a balag addressed to Nergal (see MMA 86.11.289: rev. 3–4–rev. 9'). At least one balag addressed to Nergal is known from the catalogue IV R² 53+, namely: a gal-gal buru₁₄ sù-sù.² The present text may belong to this balag. Parts of the text and MMA 86.11.289 are known from an Old Babylonian tablet (VS 2, 79), and additional parts from an Assyrian (Sm 526) and a Babylonian (K 5158) tablet fragment from Kuyunjik. H. Zimmern, in “Das Nergallied Berl. VAT 603 = Philad. CBM 11344 = Lond. Sm. 526,” ZA 31 (1917/18), pp. 111–21, edited VS 2, 79 and Sm 526, as well as another copy of the text from Nippur, which, however, does not duplicate MMA 86.11.289. A. Falkenstein published a translation of the text in W. Von Soden and A. Falkenstein, *Sumerische und akkadische Hymnen und Gebete* (Zürich-Stuttgart, 1953), pp. 83–84. The duplicates to MMA 86.11.289 (= A) are designated as follows in the transliteration: B = VAT 603 (VS 2, 79); C = K 5158 (Langdon, OECT 6, pls. XXVIII–XXIX and pp. 85–87 [collated]); D = Sm 526 (S.A. Smith, *Miscellaneous Assyrian Texts of the British Museum with Textual Notes* [Leipzig, 1887], pl. 24). The text contains a plea to Nergal, in which the lamentation singer implores the god to let his deadly power bypass man and animal. The part of the prayer preserved on the obverse of MMA 86.11.289 was hitherto unknown.

1. See CTMMA 3, p. xii.

2. IV R² 53+, cols. i–ii 34. The balag there is juxtaposed with the eršemma ur-sag a-má-uru₅ gal. See the edition by M. Cohen in *CLAM* 2, pp. 500–18, and M. Cohen, *Balag-compositions: Sumerian Lamentation Liturgies of the Second and First Millennium B.C.*, SANE 1/2 (Malibu, 1974), pp. 26–29. The balag ušum gùd ná-a, listed in IV R² 53+:col. i 33, was also addressed to Nergal, according to M. E. Cohen (see the list glued to the inside of the first volume of Cohen, *CLAM*).

9.

MMA 86.11.289

Balag: Unidentified, to Nergal(?)

Plates 16, 17

Seleucid or Arsacid period (Babylon)

Tablet missing: dimensions not known; copy by L. F. Hartman

Obverse

1'. A Obv. 1'. [.....] la 'ta¹-x-[...]

2'. A Obv. 2'. [.....-k]e₄(?) šu nam-bi-[...]-si(?) (copy: KID)
A Obv. 3'. [.....] x x x x.MEŠ-ka it-ti qa(?)-ti-[k]a la tu-mál-li

3'. A Obv. 4'. [.....] ama-bi-ta nam-ba-da-kud-da
A Obv. 5'. [.....] x it-ti um-mi-šú la ta-par-ra-as

4'. A Obv.	6'. [am]a- ^r bi ¹ (?) gi ₆ -ù-na-ke ₄	u ₄ mu-ni- ^r b-zal-e
A Obv.	7'. um-ma-šú ina šat mu-ši	u ₄ -mi uš-ta-bar-ra
5'. A Obv.	8'. [.....] x na-an-ga-ga	ér-ra-bi gig-ga-àm
A Obv.	9'. [.....] x DI la tuš-ma-ti	bi-kit- ^r su ¹ [mar]- ^r sa ¹ -at
6'. A Obv.	10'. [.....] x na-an-ga-ga	x x x [.....]-bu(?)-[I]uh(?)
A Obv.	11'. [..] (empty)	{... x x [.....] x-ab-bi
7'. A Obv.	12'. [.....] x na-an-ga-ga	KAL x [.....] KAL
A Obv.	13'. [..] (empty)	(traces)
8'. A Obv.	14'. [.....]	x (x) na [.....] a(?) ka(?)
A Obv.	15'. [.....]	x x [.....] x x TAR
9'. A Obv.	16'. [.....]	[.....]-gu]l(?)-gul-e
A Obv.	17'. [.....]	[.....] lā tu'ab]-bat
10'. A Obv.	18'. [.....] (rest of obverse broken)	[.....] x

Reverse

8'. A Rev.	1'. [ur-sag mu-LU g]i ₆ (!)-a	'im-ta ¹ (!)-[d]i-[di]-in
B	8'. ur-sag mu-LU gi ₆ -a	im-ta-di-di-na
A Rev.	2'. [qar-r]ad be-lum	mut-tal-lik mu-š[i]
9'. A Rev.	3'. [alim-m]a ur-sag Umun-irigal-la	šà im-ma-al
B	9'. a-li ^r alim-ma ur-sag Ù-mu-un-úru-gal	šà im-ma-al gi ₄ -NE
C Obv.	1'. [.....]	[.....] gi ₄ -N[E]
A Rev.	4'. [ka]b-tu qar-rad ^d Nerigal(U.GUR)	ina lib-bu lib-šú
C Obv.	2'. [kabtu qarrādu ^d Nerigal]	[ina libbi lib-š]i(?)
D	1'. [kabtu qar-r]a- ^r du ¹ ^d Nerigal(U.GUR)	i[na ...]
10'. A Rev.	5'. [šà i]m-ma-al šà-zu im-ma-al	ur ₅ -zu im-ma-al
B	10'. šà im-ma-al ur ₅ -zu-a dè-ma-al	šà im-ma-al
C Obv.	3'. [.....]	[.....] gi ₄ -NE
D	2'. [šà im]-ma-al šà-zu im-ma-al	ur ₅ -zu im-[ma-al]
A Rev.	6'. [ina lib-b]i lib-ši ina lib-bi-ka lib-šú	ina ka-<bat>-ti-ka lib-šú
C Obv.	4'. [.....]	[ina ka-bat-t]i-ka lib-ši
D	3'. [ina lib]-bi lib-ši ina lib-bi-ka lib-ši	ina ka-bat-ti-ka lib-ši

11'. A Rev.	7'.	[šà i]m-ma-al ur ₅ -zu im-ma-al	šà-zu im-ma-a[1]
B	11'.	šà im-ma-al sag-za-a dè-ma-al	šà (empty)
C Obv.	5'.	[.....im-m]a- ¹ al ¹	šà-zu im-ma-al
D	4'.	[šà im-m]a-al ur ₅ -zu im-ma-al	šà-zu im-ma-al
A Rev.	8'.	[ina lib-b]i lib-ši ina ka-<bat>-ti-ka lib-ši	ina lib-bi-ka lib-ši
C Obv.	6'.	[ina lib-bi lib-ši ina k]a-bat-ti-ka lib-ši	ina lib-bi-ka lib-ši
D	5'.	[ina lib]-bi lib-ši ina ka-bat-ti-ka lib-ši	ina lib-bi-ka lib-ši
12'. A Rev.	9'.	[gu ₄ lu-l]ju(?!)-a-ba didli	na-an-ku ₄ -ku ₄ -dè- ¹ en ¹
B	12'.	gu ₄ lu-lu-a-ba	na-an-ni-ku ₄ -ku ₄ -dè
C Obv.	7'.	[.....]	na-an-ku ₄ -ku ₄ -dè-en
D	6'.	[gu ₄ lu]-lu-a-ba didli	na-an-ni-ku ₄ -ku ₄ -dè-en
A Rev.	10'.	[ana a]l-pi du-uš-šu-ti(?) a-he-na-a	la ter-ru-ub
C Obv.	8'.	[ana alpī du-u]š-šu-ti a-he-na-a	la ter-ru-ub
D	7'.	ana al-pi du-uš-šá-a-ti a-he-na-a	la ter-ru-ub
13'. A Rev.	11'.	[gu ₄ -t]a gu ₄ sag-tuku-a	na-ma-ra-ab-ba-è-dè-en
B	13'.	gu ₄ -a gu ₄ sak-tuku	nam-ma-ra-ab-è
C Obv.	9'.	[.....]-tuku-a	na-ma-ra-ab-ba-è-dè-en
D	8'.	[gu ₄ -t]a g[u ₄ sag-tuku-a]	[na-m]a-ra-ab-è-dè-en
A Rev.	12'.	[ana a]l-pi al-pi a-šá-re-du-ti	la tu-še-es-ṣa-a
C Obv.	10'.	[ana al-p]i al-pi a-šá-re-du-ti	la tu-še-ṣa-a
D	9'.	[a]-na a[l-pi al-pi a-šá-r]e-da-a-ti	la tu-še-es-ṣa-a
14'. A Rev.	13'.	[e-zé lu-lu]- ¹ a ¹ -ba didli	na-an-ku ₄ -ku ₄ -dè-en
B	14'.	e-zé lu-lu-a-ba	na-an-ne-ku ₄ -ku ₄ -dè
C Obv.	11'.	[e-zé lu]-lu-a-ba didli	na-[an-k]u ₄ -ku ₄ -dè-en
D	10'.	[e]-zé lu-[lu-a-ba didli]	na-an-ni-ku ₄ -ku ₄ -dè-en
A Rev.	14'.	[ana še-e-ni d]u-uš-šá-a-ti	a-he-na-a
C Obv.	12'.	[a-n]a ¹ še ¹ -e-ni du-uš-šá-ti	a-h[e-na]- ¹ a ¹
D	11'.	a-na še- ¹ e(?) ¹ -[ni duššā]-ti	a-he-na-a
15'. A Rev.	15'.	[e-zé-x e-z]é sag-tuku-a	na-ma-ra-ab-ba-è-dè-en
B	15'.	e-zé-ta e-zé sag-tuku	nam-ma-ra-ab-è
C Obv.	13'.	[e-z]é-da e-zé sag-tuku-a	na-m[a-ra-a]b-ba-è-dè-en
D	12'.	e-zé-gin ₇ e-zé sag-tuk[u]-a	na-ma-ra-ab-è-dè-en
A Rev.	16'.	[ana še-e-ni š]e-e-nu šar-ḥa-ti	la tu-še-es-ṣa-a
C Obv.	14'.	[a]na(?) še-e-ni še-e-ni šar-ḥa-ti	la tu-[še-e]ṣ(!)-ṣa-a
D	13'.	a-na še-e-ni še-e-ni šar-ḥa-a-ti	la tu-še-es-ṣa-a

16'. A Rev.	17'. [umun é kaš]-a-ke ₄	'na ¹ -an-ku ₄ -ku ₄ -dè-en
B	16'. ū-mu-un é kaš-a-ka	na-an-ne-ku ₄ -ku ₄
C Obv.	15'. [umun] é kaš-a-ke ₄	na-an-ku ₄ -ku ₄ -dè-en
D	14'. umun é kaš-a-ka	na-an-ni-ku ₄ -ku ₄ -dè-en
A Rev.	18'. [bēlu(m) ana] bīt('É') ši-k[a-r]i	[l]a ter-ru-ub
C Obv.	16'. be-lu ana bīt(É) ši-ka-ri	la ter-ru-ub
D	15'. be-lum a-na bīt(É) ši-ka-ri	la ter-ru-ub
17'. A Rev.	19'. [.....] (remainder of reverse broken)	[....] (traces)
B	17'. um-ma zà kaš-e tuš-a-ra	ám nam-mu-un-gi ₄ -gi ₄
C Obv.	17'. [um]-ma zà kaš tuš-a-ra	ám nam-mu-un-gi ₄ -gi ₄
D	16'. um-ma zà kaš tuš-a-ra	ám nam-mu-un-gi ₄ -gi ₄
C Obv.	18'. [pu]r-šum-tú šá a-šar ši-ka-ri áš-bu la ta-da-ki	
D	17'. pur-šum-tú šá a-šar ši-ka-ri [aš/áš]-bat la ta-da-ak (remainder broken)	

Translation

Obverse

- 1'. Do not [...]!
 - 2'. Do not fill with (your) hands [the] of your [...]!
 - 3'. Do not separate the [(....) child(?)] from its mother!
 - 4'. Its mother spends the whole nighttime (awake).
 - 5'. Do not cause the death of [....]. his/her(?) tears are bitter.
 - 6'. Do not cause the death of [....], [....] is] frightened(?).
 - 7'. Do not cause the death of [....], [....]. . .
 - 8'. [.....], do not (?) [...]
 - 9'. [.....], do not des]troy [...]
- (rest of obverse broken)

Reverse

- 8'. [Warrior, the one] who roams around at [nig]ht,
Akk.: [Warr]ior, lord who roams around at night,
- 9'. [important] one, warrior Lord-of-the-Netherworld (Nerigal), . . .
Akk.: [im]portant one, warrior Nerigal, (the bearing mother) should be at (your) heart;
- 10'. B: (she) should be in your mind; . . .
Akk.: (she) should be [at (your) hea]rt; (she) should be at your heart; (she) should be at your mind;
- 11'. B: (she) should be in your head; . . .
Akk.: (she) should be [at (your) hea]rt; (she) should be at your mind; (she) should be at your heart!
- 12'. Do not go in to the numerous oxen (to lead them out) one after the other;
- 13'. do not expel the best oxen from among the oxen!

- 14'. Do not go in to the numerous sheep and goats;
- 15'. do not expel the best sheep and goats from among the sheep and goats!
- 16'. O lord, do not go into the “House of Beer”;
- 17'. do not kill the old woman who is sitting beside the beer!
(remainder broken)

Notes

Obverse

- 3': nam-ba-da-kud-da stands for nam-ba-da-kud-dè-(en).
- 5': Here and in the following lines we have ga-ga instead of GAM-GAM = *mātu* Š-stem, “to kill” (cf. Macmillan, *Religion of Babylonia and Assyria*, BA 5, no. Ia, p. 617 l. 7). In SBH 7:rev. 20 gá-gá occurs instead of GAM-GAM, and Langdon, *BL* 29:8 (tablet: 9') has ga-ga as does our text. The short forms gá-gá and ga-ga show that the root of the verb here is gam rather than gúru(m).
- 6': The reading (bu)-bu-luh (see *PSD* B, pp. 167–68, s.v. bu-lu-uh₂) is very uncertain. This writer cannot give a satisfactory interpretation of the Akkadian . . .]x-ab-bi.

Reverse

- 8': Before line 1' on MMA 86.11.289:rev. there are seven lines in the Old Babylonian version VS 2, 79. The extent of the gap between MMA 86.11.289 obv. and rev. cannot be determined.
- 9': For the translation of this line cf. VS 2, 79:obv. 7: ù-mu-un gi₆-a àm-di-di ama-ugu-na šà im-'ma-al gi₄¹-N[E]. The meaning of gi₄-NE is uncertain. Both the Old Babylonian version and C have gi₄-NE, but it is not taken up in the Akkadian translation.
- 17': Fourteen additional lines are known from the duplicates.

No. 10

Balag: Unidentified, to Innin / Ishtar(?)

Introduction

Less than half of the original tablet remains. Parts of the surface of the fragment MMA 86.11.350 are so abraded that some passages of the text are difficult to decipher, especially the Akkadian translations, which are written in somewhat smaller script. No duplicate of MMA 86.11.350 from the first millennium B.C. is known. The only duplicate is the Old Babylonian tablet IM 51253 from Tell Harmal, written in syllabic Emesal dialect and published by Jan van Dijk in TIM 9 as text no. 31. It is impossible to affirm that MMA 86.11.350 belongs to a particular balag composition, since the colophon at the end is missing. However, there are reasons to assume that the fragment may be a piece of the balag im-ma-al-(la) gù dé-dé.¹ The first line of the section of the prayer beginning in obv. 2' is identical with the catch-line in tablet VS 17, 54 (VAT 7843), which belongs to the balag originally addressed to Ninisina, later to Innin/Ishtar.² Also the litany preserved in ll. 6'–12' of MMA 86.11.350 is no obstacle to assigning this fragment

to the balag composition im-ma-al-(la) gù dé-dé. But since identical sections of prayers can occur in two different balag compositions, the possibility exists that MMA 86.11.350 belonged to another balag.

The obverse of the tablet describes the sorrow and grief of the goddess over the destruction of her temple, while the reverse has a description of the effects on the goddess and the people of the devastating “day” ($u_4 = \bar{u}mu$). MMA 86.11.350 is designated A, and TIM 9, 31 is designated B in the transliteration.

Several tablets of the balag im-ma-al-(la) gù dé-dé are preserved in the archive from the Nanna-ù-tu family library: *SBH* 66 with the duplicate MMA 86.11.348 + *SBH* 82 (text No. 5);³ MMA 86.11.279 (text No. 6);⁴ and according to J. A. Black, also *SBH* 58 and *SBH* 64 + 65.⁵

1. The balag im-ma-al-(la) gù dé-dé was edited in Cohen, *CLAM* 2, pp. 604–36. See also Black, “Sumerian Balag Compositions,” p. 51 no. 37, and Borger, “Schlüssel zu M. E. Cohen, *CLAM*,” pp. 35–36.
2. See Black, “Sumerian Balag Compositions,” p. 51.
3. See above pp. 43ff.
4. See above pp. 54ff.
5. Black, “Sumerian Balag Compositions,” p. 51.

10.

MMA 86.11.350

Plates 18, 19

H. 61 mm W. 70 mm Th. 25 mm

Balag: Unidentified, to Innn / Ishtar(?)
Seleucid or Arsacid period (Babylon)

Obverse

1'. A Obv.	2'. [.]	(unreadable traces) [. . .]	
2'. A Obv.	2'. [égi-re] \bar{u} di-di	\bar{u} ga-nam m[u-un-zal]	
B	1. e-gi- \bar{u} re \bar{u} -di	ga-na-am [m]u-un-ba	
A Obv.	3'. [rubātu ina] \bar{u} -u ₈ ul ¹ -tú «x» $\bar{s}a$ ¹ -ti	mar-ši-iš sur-ru-[pat]	
3'. A Obv.	4'. [(x) \bar{u} -u] ₈ (?) \bar{e} -lá-lù	mu-LU-bi \bar{a} l ¹ -di-[di]	
B	1. (empty) \bar{u} -x-am-ma e-la-lu	l[ú(?) \bar{b}]i(?) al- \bar{d} i ¹ -x	
4'. A Obv.	5'. [.] \bar{u} ¹ -u ₈ (?) e-lá-lù	ina ú-a u a-a \bar{i} ¹ -[da-a-al]	
B	(caret)		
A Obv.	6'. [bi-k]i-t[i](?) \bar{u} (?) \bar{u} ₈ (?) ¹ -i šá gi- $\bar{i}h$ -le-e ina bīti(É) šá dal- $\bar{h}i$ š laptu(TAG) ^{t[u]}		
5'. A Obv.	7'. [m]u-gi ₁₇ -ib gašan-an-na \bar{u} di-di	\bar{u} ga-na mu-un-zal	
B	2. nu-gi(-) \bar{a} n ¹ -na \bar{u} -di-te	ga-n[a-am mu-u]n(?)ba	
6'. A Obv.	8'. égi gašan-an-na	\bar{u}	(empty)
B	(caret)		

7'. A Obv.	9'. égi gašan é-an-na	ù	(empty)
B	3. ka-ša-an é-an-na-ke	ù-d[i-te]	(empty)
8'. A Obv.	10'. [g]ašan ki [Unu]g ^{ki} -ga	ù	(empty)
B	4. ka-ša-an ki Ù-nu-qa-ke	ù-di-te ga- ^{na} ¹ -a[m mu-un]-ba	
9'. A Obv.	11'. [g]ašan ^{ki} Za[ba]lam ^{ki}	ù	(empty)
	5. ka-ša-an ki Za-ba-la-ke	ù-di-te	(empty)
9a'. B	6. ka-ša-an-igi-zi-bar-ra	ù-di-te	(empty)
9b'. B	7. ka-ša-an me ú ru ri	ù-di-te ga-na-am mu-un-ba	
10'. A Obv.	12'. gašan Ḫur-sag-kalam-ma	ù	(empty)
B	(caret)		
11'. A Obv.	13'. gašan é-tùr-[k]ala[m]-ma	ù	(empty)
B	(caret)		
12'. A Obv.	14'. gašan(!) Tin-tí[r ^k]i-ra	ù	(empty)
B	(caret)		
13'. A Obv.	15'. ¹ ù di	me-ri-na im-si	
B Obv.	8. ù-di-te a-zu-mu		
14'. A Obv.	16'. ¹ ù di	i-bí-na ì-ma-al	
B Obv.	8. ù-di-te ù ru(?) e-gi im-da-x-re hul-a mu li li		
15'. A Obv.	17'. [n]u-kúš-ù	á-na ì-ma-al	
Reverse			
16'. A Rev.	1. u ₄ dam šub-ba-ra	u ₄ dumu šub- ¹ ba-ra ¹	
B	9. ù da-am šu-ba(!!)-kám(?)	ù dumu šu-ba(!!)-kám(?)	
17'. A Rev.	2. u ₄ tür gul-e	u ₄ amaš bu-ra	
B	(caret)		
18'. A Rev.	3. u ₄ áb ság (erasure: GÁ)-ga	ba-til-la-ra	
B	(caret)		
19'. A Rev.	4. ki-gub-ba-na :	sag	sìg-sig-ge-dè

B	10.	ki-g[ub](?)- ^r ba ^l (?)-b[i](!?)	sag	si-qa-ri
20'. A Rev.	5.	ki-tuš-a-na		gú ki mi-ni-in-ma-al
B	11.	[ki]-x-[]-bi(!?)		gu ki gá[l-]a-r[i]
21'. A Rev.	6.	áb ság dab-ba		nu-kal-la-ri
A Rev.	7.	ana a-šá-re-di-šú šá gal-lu-u		mu-un-ni-šu(!)(tablet: MA) ik-mu-šú
22'. A Rev.	8.	[s]ag-gá sag-gá-na		nu-kal-la-ri
A Rev.	9.	ana a-šá-re-di a-mi-li-šú		
23'. A Rev.	10.	[m]u-LU-bi mu-LU tur-ra	nu-	(empty)
A Rev.	11.	ana a-me-li-šú šá BE NI x ni-i		
24'. A Rev.	12.	[a]l-di ú[r]u(?)-da al-di	MIN(?) [. . .]	
25'. A Rev.	13.	{ur-sa}g ^d Mu-ul-líl-lá	[. . .]	
A Rev.	14.	[qar]- ^r rad ^d +En ^l -[lil] (remainder broken)	[. . .]	

Translation

Obverse

1'. [. . .] . . . [. . .]

2'. [The princess], uttering (cries of) woe, [spent] indeed (the day) in mourning.

Akk.: [The princess] is mourning bitterly with (cries of) woe since the days of yore.

3'. [. wo]e, wailing—the one who is struck with that is wandering around (aimlessly).

4'. [. wo]e, wailing—she(?) is wandering around (aimlessly).

Akk.: In (cries of) woe and alas she(?) is wandering around (aimlessly).

[Weep]ing [(and cries of) woe] with *giḥlū* (= an expression or gesture of mourning) are in the house, which has been damaged in a confusing way.

5'. The hierodule Inanna, uttering (cries of) woe, spent indeed (the day) in mourning.

6'. The princess Inanna, (uttering cries of) woe, (spent indeed the day in mourning).

7'. The princess, the lady of the Eanna (uttering cries of) woe, (spent indeed the day in mourning).

8'. The [l]ady of the district of Uruk, (uttering cries of) woe, (spent indeed the day in mourning).

9'. The [l]ady of the district of Zabalam, (uttering cries of) woe, (spent indeed the day in mourning).

10'. The lady of Ḫursagkalamma, (uttering cries of) woe, (spent indeed the day in mourning).

11'. The lady of the Eturkalamma, (uttering cries of) woe, (spent indeed the day in mourning).

12'. The lady of Tintir/Babylon, (uttering cries of) woe, (spent indeed the day in mourning).

13'. The cries of woe cleave to her feet;

- 14'. the cries of woe are in her face (or: in her eyes);
 15'. restlessness is at her side.

Reverse

- 16'. The day that throws down the spouse, the day that throws down the child,
 17'. the day that destroys the cattle pen, the day that uproots the sheepfold,
 18'. the day that brings the scattered cows to an end,
 20'. (that day) bent down (her) neck (i.e., the neck of the goddess) in her dwelling place
 19'. in order to make her tremble in her residence.
 21'. The scattered cows who have(!?) no one who seizes them,
 Akk.: For the foremost one whom the enfeebling *gallû*-demon has captured
 22'. the person who does not (have!?) another person,
 Akk.: For the foremost one his/its man
 23'. this man who does not (have!?) (anymore his) little child,
 Akk.: For his/its man . . .
 24'. they(?) wandered around (aimlessly), near the city(?) they(?) wandered around (aimlessly), . . . [. . .]
 25'. [The war]rior Enlil [. . .]
 (remainder broken)

Notes

Obverse

- 2': Cf. the catch-line on tablet VS 17, 54 (VAT 7843):rev. 21'-22' (collated):

21'. égi-re ù di-di	¹ù¹ [. . .]
22'. ru-bat i-na u-u₈ (over erasure)-a	¹ul-tú (?)¹ [. . .]

Here and in VS 17, 54, ù di-di is no doubt defective for ù di-dè; the corresponding form in the text written in syllabic script is ù di-te. ù-a -di is translated as *nuzzumu*, “to lament,” in MSL 16, pp. 236, 297. I also take the ù in the second half of the Sumerian line as a cry of lament. ga-nam and the parallel ga-na in l. 5 are the interjection ga-na(m) (see C. Wilcke, “Das modale Adverb i-gi₄-in-zu im Sumerischen,” *JNES* 27 [1968], pp. 240–42; M.-L. Thomsen, *The Sumerian Language*, Copenhagen Studies in Assyriology 10 [Copenhagen, 1984], p. 86, §153; and Krecher, *Kultlyrik*, p. 164). The Akkadian “translation” of the line in MMA 86.11.350 deviates considerably from the Sumerian original, as is also the case for the rest of the Akkadian translation of this text. However, the content of the Sumerian line is largely correctly conveyed in this case. Should the uncertain reading *ultu šāti* be correct, the scribe was presumably rendering the Sumerian ga-nam with it, unless he was thinking of the element ù, confusing it with u₄-zal (= “to spend time,” *ūmišam šutabru*) due to the similar pronunciation. The restoration m[u-un-zal] in A follows the present tablet, obv. 7'. In B, written in syllabic script, we have instead, mu-un-ba. This writer cannot explain this deviation. The spacing of the line in MMA 86.11.350:obv.7' indicates that it should not be read as mu-un-ni-[ba].

- 3'-4': e-lá-lù is no doubt an orthographic variant of e-la-lu = *lallarātu*, “cries of mourning.” See also the Notes to text No. 4 = MMA 86.11.349+:obv. 2 for e-la-lu. Thus its rendering with *ai* or *aia*, a “cry of grief,” in l. 4' below correctly gives the sense. The following Akkadian line is more a learned exposition of the Sumerian than a translation. The scribe has divided the word e-lá-lù into syllables and translated them

individually, in the same way that the names of Marduk are explained in the last tablet-and-a-half of the creation myth *Enūma eliš*:

e (as spoken like é): = *bitu*

lá = *lapātu* (see MSL 16, p. 284, 11" [Nabnītu G₁]: 'šu¹-lá-lá = [lupputu])

lù = *dalāhu*

The Akkadian *gihlû* / *guhlû* corresponds to the Sumerian of text No. 5 = MMA 86.11.348:rev. 12': gi-*hul-a* (see above, p. 48). We do not know whether or not *gihlû* had a corresponding Sumerian term in our text. *ù-u₈-i* in an Akkadian context also occurs in *RAcc*, p. 46, l. 18.

- 5' ff.: The changing phrases in the litany, beginning with l. 5', occur in numerous Emesal litanies addressed to the goddess Innnin (see e.g., Cohen, *CLAM* 2, p. 653, d+68–d+77; von Weiher, *SpTU* 2, 27:obv. 2–12; Maul, "Herzberuhigungsklagen," pp. 283–84, ll. 6'–15'). B has nu-gi(-)an-na (the main dialect) instead of nu-gig(-)an-na [= *ištarītu(m)*] in the normal orthography. The Emesal form would have been: mu-gib(-)an-na.
- 9a: As written here, Innnin's epithet is a mixture of Emesal Gašan-i-bí-zí-bar-ra and the main dialect Nin-igi-zí-bar-ra (see MSL 4, p. 9, 88). Ga-ša-an-igi-zí-bar-ra as an epithet for Innnin occurs also in the Old Babylonian balag ša-zu a-še-er-bi (see S. N. Kramer, "By the Rivers of Babylon: A Balag-Liturgy of Inanna," *AuOr* 5 [1987], p.72, l. 8; p. 75, l. 342; and p. 77, l. 406). See also Maul, "Herzberuhigungsklagen," pp. 204–5 (Ešh. 36:4') and p. 284 (Ešh. 70:16').
- 9b : The meaning of me ú ru ri is unknown to this writer. It is not very likely that ka-ša-an me ú ru ri stands for gašan-mah^dA-ru-ru (cf. Maul, "Herzberuhigungsklagen," p. 284 [Ešh. 70:15']).
- 12': The sign gašan is written defectively.
- 13'–15': The Old Babylonian version cannot be made to agree with the MMA text.

Reverse

- 16': Compare with this line l. 404 in *Lamentation over the Destruction of Ur* (AS 12, p. 66) and the duplicate UET 6/2, 139:rev. 48; see further Maul, "Wenn der Held," p. 324, Sm 325:7' and the references there in n. 28.
- 17': Cf. the parallels in Cohen, *CLAM* 1, pp. 259–60, b+110, and Cohen, *CLAM* 2, p. 607, a+24.
- 19': sag-síg is a gesture expressing fear (see B. Alster, *Dumuzi's Dream* [Copenhagen, 1972], pp. 91–92, and cf. MSL 16, pp. 53, 87 [Nabnītu I], where sag sig-ga is translated *nakāpu ša rēši*). The scribe has put a broken *winkelhaken* behind the na, as if sag were a variant of síg. Obviously he misunderstood the text.
- 20': gó ki-ma-al/gál, literally "bend the neck down to the ground," could be translated into Akkadian *qadādu*, "bend down deeply" (see *CAD Q*, p. 44, and *kanāšu*, "to bend down," and see also *CAD K*, p. 158).
- 21': Ll. 21'–24' correspond to ll. 12–15 in the Tell Harmal text. The latter's preserved traces are so faint that they cannot be included in the transliteration. The interpretation of ll. 21'–22' is extremely difficult. It is quite obvious that even the scribe had to struggle with these difficulties when he was translating the Sumerian lines into Akkadian. He translated the various Sumerian words into a learned Akkadian commentary as he had already done in obv. 4', perhaps without understanding the actual meaning of the Sumerian line rev. 21'. Here only dab-ba is translated correctly to *kamû*. ság was translated as if it had been sag, *ašarēdu*, although the scribe should have known better. In rev. l. 18' he had first written ság-gá, then erased the gá and substituted ga. Apparently, the translator already had problems with the corrupt form nu-kal-la-ri in the Sumerian.

Based on lists with the well-known equivalents kal-la = *enšu* (see MSL 17, pp. 74, 175 [Erim-*huš* V]) he translated nu-kal-la-ri as *munnišu*, without taking the nu into consideration. Only áb remains in the Sumerian line corresponding to the Akkadian *gallû*. The basis of this equation is not clear to this writer. Maybe the scribe thought that since the Akkadian term for “spirit of the dead,” *etemmu*, can correspond to Sumerian *gu₄*, “bull” (*CAD E*, p. 397b top, and R. Borger, *Assyrisch-babylonische Zeichenliste*, AOAT 33 [Neukirchen-Vluyn, 1988], p. 123 no. 297), an equation áb, “cow” = *gallû* is also possible.

The translator’s opinion that kal-(la) meant *enēšu* is incorrect. The signs nu-kal-la-ri should certainly not be read nu-mál-la-ri, even though this unorthographic writing is attested in several Neo- and Late Babylonian texts (J. Krecher, “Die sumerischen Texte in ‘syllabischer’ Orthographie,” *WO* 4 [1967–68], p. 265). Instead of nu-gál/kal-la-ri one would of course have expected the Emesal form. Thus nu-kal-la-ri is quite certainly a “hearing error” for nu-gál-la-ri (for this form see text No. 5:obv. 14 [= l. 13] and the parallels cited in the Note to l. 13 in this volume on p. 52. This confusion may have arisen if the scribe (educated as a *kalû* singer) wrote down the text from memory. It is noteworthy that the colophons of the tablets from the Nanna-ù-tu family library mention the original sources from which they were copied only very rarely.

The *šu* in the Akkadian line has an incorrect form with three rather than four horizontal wedges. The reading *ba* can be excluded, since BA elsewhere in this text is written correctly with a slanting lower wedge.

- 23': The Akkadian line may be read as follows: *ana a-me-li-šú šá be-lí ba-ni-i*.
- 24': The verbal form al-di can be seen clearly (twice) in the badly preserved TIM 9, 31:15.
- 25': The litany that begins at this point in the text deviates from TIM 9, 31:16: [x (x)?] mu-gi-ib(?) an(!?)n[a(?)].

No. 11

Balag: Unidentified

Introduction

As can be seen in the drawings on page 85, the broken upper edge of the tablet fragment MMA 86.11.360+ tightly joins with several other MMA pieces (MMA 86.11.517 + MMA 86.11.544 + MMA 86.11.546 + MMA 86.11.551 + MMA 86.11.553 + MMA 86.11.555) as well as with the fragment VAT 581 (= *SBH*, p. 91 no. 50, lower fragment). The third fragment of the tablet, *SBH* 50 (VAT 415), has contact at one point only with VAT 581 + MMA 86.11.360+. A physical join is not possible. The tablet contains the “Great Emesal Litany of the Gods,” which is included in several balag compositions. It remains uncertain whether *SBH* 50 and therefore also MMA 86.11.360 belong to the balag *mu-tin nu-nus dím-ma*, as suggested by J. A. Black.¹ The “Great Emesal Litany of the Gods” and other Emesal litanies of gods will be published by R. Borger in *Die Emesal Götterlitaneien* (forthcoming). The tablet VAT 415 (+) VAT 581 + MMA 86.11.360+ contains Borger’s ll. 52–73 and ll. 78–118 on the obverse² and ll. 125–29³ on the reverse.⁴ The MMA fragment has ll. 65–73 and ll. 78–93 of the litany.⁵ Only four (double) lines are missing between MMA 86.11.360:obv. 9' and rev. 1'. The fragment is particularly important, since it includes previously unknown Akkadian translations of certain Sumerian divine names and epithets from the “Great Emesal

Litany of the Gods.” In their long history of transmission, some of the Sumerian passages had been deeply deformed. Their Akkadian translation reflects the interpretation of the first-millennium B.C. scribes and as such cannot be trusted to be identical in every respect with the original meaning of the Sumerian text.

1. Black, “Sumerian *Balag* Compositions,” p. 42 no. 10.
2. Ll. 95 and 96 are not preserved (lacuna between VAT 581 and VAT 415).
3. Lines 119–25 (= K 3315+, II, 11’–III, 4) are missing in this copy of the text.
4. This writer would like to thank Professor R. Borger for giving permission to use his unpublished manuscript.
5. These lines correspond to the following parallels: Cohen, *CLAM* 1, pp. 238–40, c+310–c+318 and c+323–c+337 (mu-tin nu-nus dím-ma); Cohen, *CLAM* 1, pp. 286–89, e+228–e+235 and e+240–e+255; and Cohen, *CLAM* 1, pp. 307–9, c+184–c+192 and c+197–c+211 (e-lum gu₄-sún); Cohen, *CLAM* 1, pp. 261–64, a+244–a+251 and a+156–a+271 (zi-bu-ù-um zi-bu-ù-um) to Enlil. Cf. also E. Bergmann, “Untersuchungen zu syllabisch geschriebenen sumerischen Texten,” *ZA* 56 (1964), pp. 14–15: obv. 5–rev. 10, and especially pp. 19–28.

11.

MMA 86.11.360 + MMA 517 +

Balag: Unidentified

MMA. 86.11.544 + MMA 86.11.546 +

MMA 86.11.551 + MMA 86.11.553 +

MMA 86.11.555 + SBH 60 (VAT 581 (+)

VAT 415)

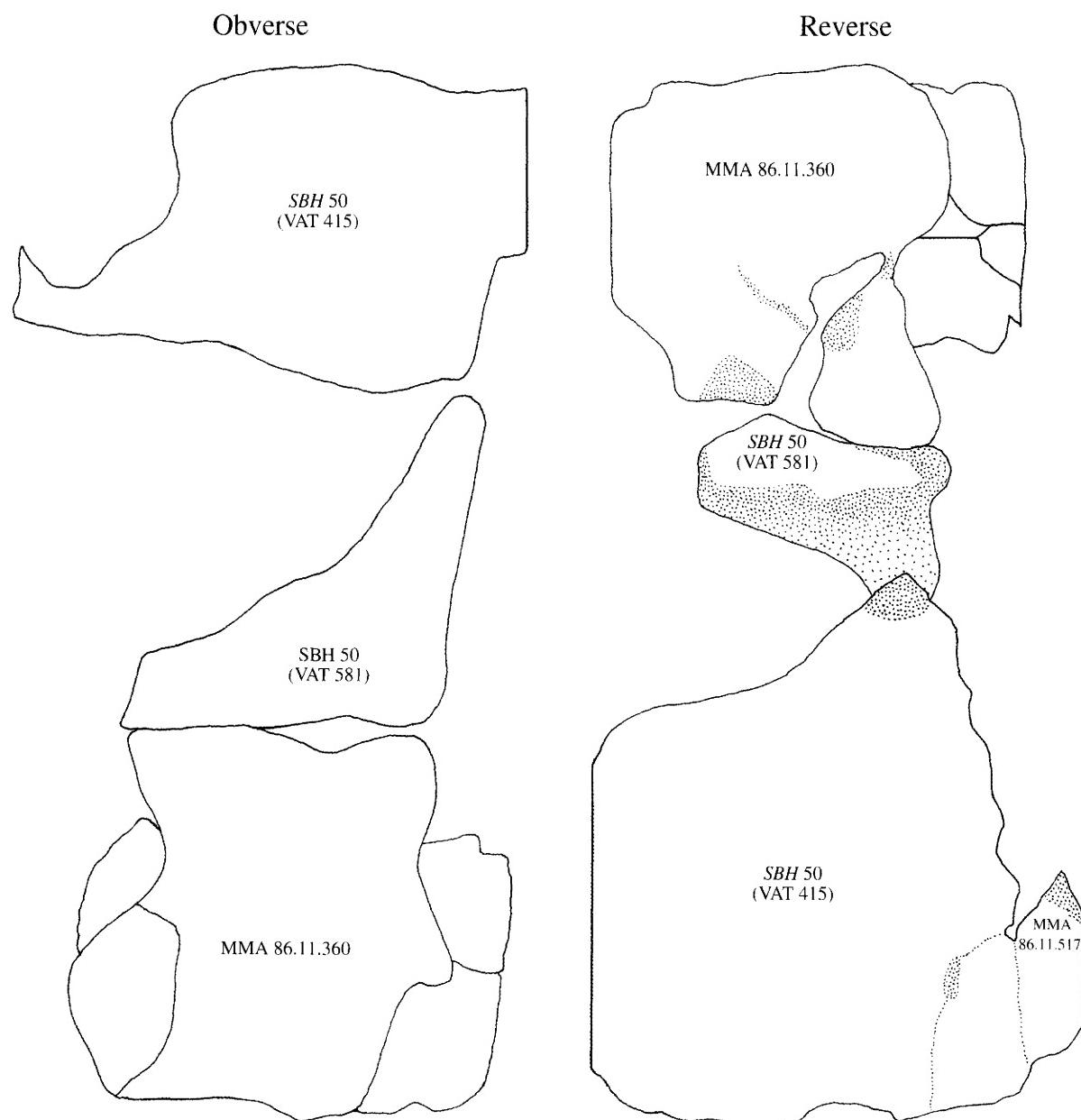
Plates 20, 21

Seleucid or Arsacid period (Babylon)

H. 73 mm W. 83 mm Th. 25 mm

Obverse

1'. [du ₅ -mu sa ₆ -ga]	[^d Nin-kar-nun-na(?)]
[mārtu(m) da-m]i- ^r iq-tú ¹	^d MIN ¹
2'. [gašan-mug(-)LUM-ma-S]U(?)	ur-sag-[gá]
[^d Nin-mu]g(-)LUM-ma-SU	qar-ra-du
3'. [^d Umun-irigal-la]	umun á-gíd-[da]
[^d Nè-er]i ₁₁ -gal	be-lum šu-ma
4'. [^d Ir]-ra-gal	gú á nu-sá
[^d Šu-ma]	a-šá-re-du e-mu-uq la šá-na-an
5'. [^d Lamma] sa ₆ -ga	sila dagal-la edin-na
[lamas-s]u da-mi-iq-tú	šá re-bit ú-x-x
6'. [^d NiJn-ìmma ^d MIN	Kù-si ₂₂ -bàn [: ^d MIN(?)]-[da]
7'. [umun na]m-ma-ke ₄	Umun-še[n-kul-kul]
[be-e]l ši-ma-a-ta	^d Nin-še[n-kul-kul]
8'. [nu-nu]s gùn	^d A-ba ₄ -b[a ₄ -sa ₆ -ga]
[sin-niš-t]i ti-i[t]-a-ru	^d MIN
9'. {umun-GÌR} Umun-maš	sa[nga ₅ -maḥ abzu-ke ₄]
(rest of obverse broken)	



Reverse

- (beginning of reverse broken)
- 1'. [^dUD-ta-è-d]è(?) ^r: ^dUTU šá(?) ^{sa}¹ x [. . .]
 - 2'. [^dUmun-ma-d]a : ^dNin(!)(tablet: DAM)-ma-da
 - 3'. [umun]-^á¹-zu : ^dNin-ma-zu
 - 4'. [gašan-gì]r-da : ^dNin-gìr-da
 - 5'. [^dE]r-re-eš-da ur-sag
 ^r^dE[r]-re-eš-da qar-ra-du
 - 6'. [ama] ^é¹-ur-sag : um-mu ŠU-ma
 - 7'. [sag-d]u₅ an-na : šá-as-suk-kát ^dA-nim
 - 8'. [sukkal(-)a]n-na : ŠU-ma
 - 9'. [^dPa-b]il-sag : ^dMIN
 - 10'. [^dG]u-nu-ra : ^dMIN
 - 11'. [^dD]a-mu sa₆(!)(tablet: EN.E)-ga
 [^d]Da -mu da[m]-qa (-qa wr. over: DINGIR.MIN?) [be-e]l Me-[e]r-si
 - 12'. [^dIškur-e :] ^dMIN
 - 13'. [^dEn/^dUmun-bi]- ^rlu¹ -lu
 [^dEn-bi-lu-lu]
 - 14'. [umun ši ka-nag-gá]
 [bēlu(m) na-piš-tú ma-a-tú]
 [n]a-piš-tú ma-t[a-a-tú]
 - 15'. [^dSù-ud-ág dumu-nun-na :(!) ^dMIN(!) mar(!) rubē(NUN) (!) ama] ^é¹-^ršà¹ [:] [um-mu ŠU-ma] -[ba]
(the lines SBH 50:rev. 3'ff. follow here)

Translation

Obverse

- 1'. [The goo]dly [child (Akk.: daughter)], Ninkarnunna,
- 2'. [Nin-mu]g(-)LUM-ma-SU, the warrior,
- 3'. [Nerga]l, lord of . . .
- 4'. [Irraga]l, whose forces are without equal,
 Akk.: [Irragal], the foremost one, force without equal,
- 5'. good [Lamma-spi]rit of the wide streets and of the steppe,
- 6'. [Ni]nimma, Kusiban[da],
- 7'. [Ior]d of the fate, Nin-šeñ-ku[l-kul],
- 8'. [wom]an (whose eyes? are) iridescent, Abab[asaga],
- 9'. [.] Ninmaš, the sa[ngamah]-priest of the apsû],
(lacuna of 4 [double]-lines)

Reverse

- 1'. [UD-ta-è]-dè, [the one of the holy place],
 Akk.: Šamaš, who [. , the lord of the holy place],

mu-LU ki kù : bel ašri elli -ga]
šùd-dè An [:] [kārib] ^dA-nim -[na]
umun á-gíd : be-el Š[u-ma] -da
Umun-mu-zí : ^dNin-giz-zi-da-da
gašan šubur-ra
 be-el er-še-tim
gašan-tin-lu : ^dNin-tin-ug₅-ga -ba
gašan-ł-si-in^{ki} : ^dN[in]-x x (x) -[na]
gašan-šubur : ^dNin-šubur-ra -ra
umun La₇-rà-a[g :] be-lum La-rak^{ki}
dim-^lgal¹ [kalam :] [ta]r-kul-lum ma-a-tú -ma
umun [Me-e]r-si-a
[n]a-din e-[m]u-uq ^drA¹-[nim]
[š]i kur-kur-[ra]

- 2'. Ninmada, the one who prays to An,
 3'. Ninazu, the lord of . . .
 4'. Ningirda, Ningizzida,
 5'. Errešda, the warrior, the lord (Sum.: the lady) of the netherworld,
 6'. the mother of the house of the chief city (!), Nintinugga,
 Akk.: the mother of the *ditto* (i.e., the “House-of-the-Warrior”), Nintinugga,
 7'. Registrar of heaven/of An, Lady-of-Isin,
 8'. [the vizier of hea]ven /of An, Ninšubur,
 9'. [Pab]ilsag, the lord of Larak,
 10'. [G]unura, the mast of the land,
 11'. the goodly Damu, the lord of Girsu,
 12'. [Iškur] /Adad, the lord of inundation,
 13'. [Enbil]ulu, [strength gi]ven by An,
 Akk.: [Enbilulu], the one who gives the strength of A[n],
 14'. [lord, life of the land (Sumer)], life of (all) the lands,
 15'. [Sud'ag, the child of the prince, the mother of the] Ešaga,
 (the lines *SBH* 50:rev. 3'ff. follow here)

Notes**Obverse**

- 1': The remaining traces of signs on the join *SBH* 50 (VAT 581):obv. 26 are underlined in the transliteration.
 3': Cf. VS 2, 11:col. vi 6 with the variants \bar{u} -mu-un é-gíd-da (= Cohen, *CLAM* 1, p. 286, e+229). See also E. Bergmann, “Untersuchungen zu syllabisch geschriebenen sumerischen Texten,” ZA 56 (1964), p. 22. Whether Nergal is represented as the lord of a building or as the owner of the weapon *ariktu* is not clear (see IV R² 18*, no. 3, col. iii 7–8: á-gíd-da = *ariktu*). The interpretation of á-gíd-da to šU-ma in the Akkadian version and the variant é instead of á point to the first possibility. For á-gíd-da see also below under rev. 3'.
 5': It is not clear to this writer how edin-na was interpreted in the Akkadian version of the litany.
 7': See MSL 4, p. 5, 25: $\bar{d}S$ en-kul-kul = d Nin-kul-kul = d MIN (i.e.: d Nin-ìmma).
 8': See MSL 4, p. 5, 26: d Nu-nus-gùn-a = d Munus-gùn-a = d MIN (i.e.: d Nin-ìmma).
 9': Restoration from *SBH* 48:obv. 63. For the missing four (double) lines see *SBH* 48:obv. 64–rev. 3.

Reverse

- 2': See MSL 4, p. 5, 29: d Gašan-ma-da = d Nin-ma-da = muš-lah₅ d E[n-líl-l]á-ke₄.
 3': d Nin-ma-zu in MMA 86.11.360, rev 3' is probably a scribal error for d Nin-á-zu. For á-gíd-da cf. Note to obv. 3' above.
 3'–4': For Ninazu see J. J. A. van Dijk, *Sumerische Götterlieder* 2, Abhandlungen der Heidelberger Akademie der Wissenschaften, philosophisch-historische Klasse (Heidelberg, 1960), pp. 71–80. See also MSL 4, p. 9:
 103. d Umun-a-zu = d Nin-a-zu = šU-ma
 104. d Gašan-gír-da = d Nin-gír-da = DAM-BI MUNUS
 105. d Umun-mu-zi-da = d Nin-giš-zi-da = šU

- 6': This is obviously an error in the tradition. The better variants all have the version from K 4629 (*SBH* III) + Rm 132 (V R 52, 1):col. ii. 55' (= *SBH* p. 134, III, col. ii 22 = Cohen, *CLAM* 1, p. 239, c+328) ama é úru s[ag-g]á gašan-tin-lu-ba (see also *SBH* 48:rev. 9: am[a úr]ju sag-gá [gaša]n-tin-lu-ba). úru sag-gá has been misunderstood as ur-sag-(gá) and misinterpreted because of the combination with é, “house” as the name of a temple. This error may have been introduced by the scribe of this tablet, or the scribe of the tablet this was copied from, when he wrote it down from memory and was misled by the similar sounding é-ur-sag and é úru sag-ga.
- 7': See MSL 4, p. 9, 97.
- 8': The scribe understood the epithet of Ninšubur, sukkal an-na, to be a name as indicated in the Akkadian version of the line.
- 9': For Larak compare D. O. Edzard, “Larak,” *RLA* 6 (1980–86), pp. 494–95, and Krecher, *Kultlyrik*, pp. 86–87.
- 11': The scribe no longer understood that Me-er-si is the Emesal form of the name Gír-su (see also MSL 4, p. 9, 95). He therefore repeated the Emesal form Me-er-si in the Akkadian translation (in contrast to the parallel passage K 4629 [*SBH* III] + Rm 132 [V R 52, 1]:col. ii 62') (= *SBH* p. 134, III:col. ii 29 = Cohen, *CLAM* 1, p. 240 top, c+333, there: [be-e]l Gír-¹su¹[²kil]).
- 12': The restoration of the Akkadian version follows K 5134:col. ii 17' (= Cohen, *CLAM* 1, p. 240, c+334).
- 13': We would have expected the Emesal form ⁴Umun-bi-lu-lu in the Sumerian version of the line. However, even in the parallel *SBH* 48:rev. 16 we find the main dialect form: ⁴En-bi-lu-lu. See MSL 4, p. 7, 43: [⁴]Umun-¹bi¹-lu-lu = ⁴En-bi-lu-lu = ⁴AMAR.UTU. K 5134:col. ii 19' (cf. Cohen, *CLAM* 1, p. 240, c+335) has a different translation of the Sumerian line [⁴En-bi-lu-lu] e-mu-qí ⁴A-nim id-di-nu-šú; ([Enbilulu], the strength of Anu was given to him). This is closer in meaning to the Sumerian version than the Akkadian translation of MMA 86.11.360.
- 14'–15': Signs taken from *SBH* 50 (VAT 581):rev. 1–2 are underlined in the transliteration.
- 15': For the epithet ama é-šá-ba see Krecher, *Kultlyrik*, pp. 124–25 to II, 11. ⁴Sùd dumu nun abzu is translated by (⁴Sùd) ma-rat rubê(NUN) šá apsî(ABZU) in K 2004 (Macmillan, *Religion of Babylonia and Assyria*, BA 5, no. 1b:obv. 18) (= Cohen, *CLAM* 2, p. 613, b+137). There are more traces of signs preserved on *SBH* 50:rev. 2' than were indicated by G. Reisner. One would have expected mārat rubê instead of mār rubê. It is possible that the goddess ⁴Sùd was mistaken for ⁴Su-ud-ág, and so also M. Civil, “Enlil and Ninlil: the Marriage of Sud,” *JAOS* 103 (1983), p. 44; compare, however, the notes by W. G. Lambert, “Further Notes on Enlil and Ninlil: the Marriage of Sud,” *JAOS* 103 (1983), p. 65b. The name ⁴Su-ud-ág could also be translated into Akkadian ⁴A-a, the name of the wife of the sun god (see e.g., S. M. Maul, “Zwei neue ‘Herzberuhigungsklagen,’” *RA* 85 [1991], p. 71, rev. 3', and W. G. Lambert, *JAOS* 103 [1983], p. 65b).

No. 12

Balag: Colophon Fragment

Introduction

MMA 86.11.300 is the lower right corner of the reverse of a “long tablet,” which probably originally contained a *nishu* from a balag composition. Only the surface of the reverse, which has chipped off the tablet core, is preserved. The title of the balag to which the fragment belonged would have been contained in the line immediately before l. 1'. The fragment comprises only what remains of the colophon. Unfortunately, this writer has not been successful in trying to determine to which of the Emesal texts from the Metropolitan Museum published here, or from among the tablets published by G. Reisner in *SBH*, MMA 86.11.300 belongs. The present tablet was written on the 30th of the month of Tašritu in year 177 of the Seleucid Era, i.e., the 30th of October 135 B.C. according to the Julian calendar.¹ Thus, to the best of our knowledge, MMA 86.11.300 is one of the earliest tablets written by members of the Nanna-ù-tu family in Babylon. Like many other tablets from that family’s library, MMA 86.11.300 has a double date (Seleucid and Arsacid), originating from the thirties of the second century B.C., when Babylon was under the Parthian empire.² This tablet was written by Marduk-zēr(a)-ibni, but it belonged to his father, Ea-balāssu-iqbi, who as *kalū*(?)³ was in charge of the Nanna-ù-tu family library from at least 137 B.C. (= 175 Seleucid Era = 111 Arsacid Era)⁴ until 113 B.C. (= 199 Seleucid Era = 135 Arsacid Era).⁵ His son Marduk-zēr(a)-ibni only worked with his father as *galatirru*, “*kalū* apprentice,” for a few years (137 B.C. = 175 Seleucid Era = 111 Arsacid Era)⁶ until maybe 134 B.C. = 178 Seleucid Era = 114 Arsacid Era).⁷ From May 129 B.C.,⁸ and perhaps even before then, his brother Bēl-apla-iddin took over the position as *galatirru*. Unfortunately, we do not know if Marduk-zēr(a)-ibni died young or if he simply left the family. Marduk-zēr(a)-ibni wrote *SBH* 5 (137 B.C., text No. 2), MMA 86.11.347 + *SBH* 35 (134 B.C.), and *SBH* 18 (no date preserved)⁹ in addition to the tablet edited here.¹⁰

1. See R. H. Parker and W. H. Dubberstein, *Babylonian Chronology 626 B.C.–A.D. 75* (Providence, 1956), p. 42.
2. See also Oelsner, “Randbemerkungen zur arsakidischen Geschichte,” pp. 25–45, esp. p. 30.
3. See below l. 2'.
4. See *SBH* 5:rev. 18–21.
5. See the colophons of tablets *SBH* 10, 15, 19, and 45.
6. See *SBH* 5:rev. 19–21.
7. See above text No. 2, MMA 86.11.347 + *SBH* 35:rev. 12'–14'.
8. See *SBH* 25:rev. 27 (against G. Reisner’s copy it clearly has: MU 1 ME 83(!) KAM*).
9. See *SBH* 18:rev. 22–23.
10. It remains unclear whether Marduk-zēr(a)-ibni or his brother Bēl-apla-iddin was the scribe of text No. 8, MMA 86.11.346 + *SBH* 60 + *SBH* 84. The tablet was written in 131 (or 130) B.C. (= 117 or 118 Arsacid Era) by one of the two sons of Ea-balāssu-iqbi (see *SBH* 60:rev. 39, and Oelsner, “Randbemerkungen zur arsakidischen Geschichte,” pp. 31–32 and p. 45).

12.

MMA 86.11.300

Plate 22

H. 70 mm W. 49 mm Th. 14 mm

Balag: Colophon Fragment

S.E. 177 (= 135 B.C.), Babylon

Reverse

(beginning of reverse broken)

- 1'. [(. . .) *ana zamāru(DU₁₂)^{ru} nashi(z1?)^{hi} imgiddēt^{IM¹.GÍD.¹DA¹}] ^[r^d]*Ea([IDI]M)-[balāssu-iqbi]**
- 2'. [^{lú}*kalē(GALA?)*] *ili(DINGIR^{meš}) qāt(ŠU^{II})* ^{ld}*Marduk(AMAR.UTU)-zēra(NU[M]UN)-ibni(D[U])*
- 3'. [*mārū(A)-šú šá* ^d*Ea(IDIM)-balāt(TIN)-su-iqbi(E) mār(A)* ^{ld}*Nanna-ù.tu*
- 4'. [^{lú}*gala-t]ur-ru* ^d*AMAR.UTU.KAM* Bābili(KÁ.DINGIR.RA)*
- 5'. [^{lú}*tašritu(D)UL?*).30.KAM* MU 1 ME 13.KAM*
- 6'. [*šá š]i-i* MU 1 ME 77.KAM* ¹*Ar-šá-¹ka¹-a šarri(LU[GAL])*

Translation

- 1'. [(. . .) Copied [for singing]. Long tablet of Ea-[balāssu-iqbi],
- 2'. [the lamentation singer] of the gods. Hand of Marduk-zēr(a)-ibni,
- 3'. [the son of Ea]-balāssu-iqbi, the descendant of Nanna-ù-tu,
- 4'. [the kalū apprentice]ice of Marduk. Babylon,
- 5'. the 30th [of (the month) Tašritu, in the year 113 (of the Arsacid era),
- 6'. [that] is the year 177 (of the Seleucid era, when) Arsaces was king.

Notes

Reverse

- 4': Cf. the parallel *SBH* 28:rev. 22: ^{ld}*Ea(IDIM)-balāt(TIN)-s[u-iqbi(E) mārū(A)-šú ^{lú}gala]-^rtur-ru¹ ^d*Marduk* (ŠU.KAM*).*

No. 13

Eršemma: dilmun^{ki} nigin-na, to Marduk*Introduction*

The tablet MMA 86.11.351 contains an Emesal prayer, which is very similar to the eršemma: dilmun^{ki} nigin-na, addressed to Enlil.¹ This eršemma could form the conclusion of the balag composition abzu pe-el-lá-àm (compare IV R² 53+:cols. i-ii 2) and of both the canonical and the noncanonical versions of the balag umun še-er-ma-al-la an ki-a (see IV R² 53+:cols. i-ii 24, 39). dilmun^{ki} nigin-na is also included as the prayer section in the balag composition mu-tin nu-nus dím-ma (second tablet) and am-e bára an-na-ra.² In addition, the prayer dilmun^{ki} nigin-na was also used as a ritual eršemma.³ However, MMA 86.11.351 is not an exact duplicate of the already known versions of the eršemma dilmun^{ki} nigin-na.⁴ Although the refrain of our prayer is largely identical with the refrain of the eršemma dilmun^{ki} nigin-na, the MMA 86.11.351 litany is quite different from the introductory litany of that eršemma. The litany of MMA 86.11.351:obv. 1–7 has epithets of the god Enlil, but they are followed by a litany

addressed to Marduk (obv. 8–14), in contrast to the text of the prayer dilmun^{ki} nigin-na. The prayer given here is probably addressed to Marduk, who is credited with Enlil's attributes.⁵

1. M. E. Cohen edited this prayer in his book *Eršemma*, pp. 110–12 (with pp. 184–85), and pp. 113–17 (with pp. 185–86). The ritual eršemma dilmun^{ki} nigin-na (see IV R² 53+:col. iii 22) is also cited in text No. 14, MMA 86.11.288:rev. 22 (see p. 97).
2. Cf. the Note to text No. 14, MMA 86.11.288:rev. 22 (see p. 101).
3. See note 1 above.
4. MMA 86.11.351 shows certain similarities with VS 17, 55 (VAT 6427).
5. Cf. Laws of Hammurabi: col. i 1–15 (see edition in M. Roth, *Law Collections from Mesopotamia and Asia Minor*, Writings from the Ancient World 6 [1997]) and Marduk's rise in *Enūma eliš* (see edition by W. G. Lambert, forthcoming).

13.

MMA 86.11.351

Plate 23

H. 75 mm W. 53 mm Th. 13 mm

Obverse

1. [dilmun ^{ki} nigin-n]a(?)	úru-zu [u ₆ . . .]
[.] x RI x (over erasure?) -ti	āl(URU)- ^t ka ¹ [hi-it-ti (?)]
2. [Nibrū ^{ki} (-) du]r-an-ki nig[in]?-na mu-un-x [. . .]	[ana(?) Ni-ip-pu-r]u(?) mar-kas šá šamē(AN) ^e u erşetim(KI) ^{tim} ^t ma ¹ (?) -x [. . .]
3. [úru-zu(?)] ū[e]-eb ¹ é-kur-ra-[k]e ₄	nigin-na [. . .]
[ana(?) a-l]i-ka li-bit É-kur	[. . .]
4. [alim]-ma	umun kur-kur-r[a]
[ka]b-tu	be-el ma-ta-a-tú
5. [umun dug] ₄ -ga zi-da	^d Mu-ul-líl a-a ka-nag-g[á]
[bēlu(m)] šá qí-bit(!)(tablet: KID)-su ki-na-a-ti	^d MIN a-bi ma-a-tú
6. [alim-m]a	umun Nibrū ^{ki} -a
[ka]b-tu	be-el Ni-ip-pu-ru
7. [i-bí du ₈ ní-t]e-en-na	am érin-na di-di ù-lul-la ku-ku
[bāri ramāni-š]ú mu-de-el um-ma-ni-šú šá ša-lal sar-ra-a-tú šal-lu	
8. [alim-ma]	ur-sag ^d Asal-lú-hi
[ka]b-tu	qar-rad ^d Marduk(AMAR.UTU)
9. [umun ^d +En-bi-lu-lu]	dumu sag ^d +En-ki-ke ₄
[be-lum ^d MIN ma-r]i reš-tu-ú šá ^d Ea(IDIM)	
10. [alim-ma]	umun Tin-tir ^{ki}
[ka]b-tu	be-lum É.MIN
11. [umun é-sag-íl-l]a	umun é-zi-da
[be-lum É.MIN]	be-lum É.MIN

12.	[alim-ma] [<i>kab-tu</i>]	ur-sag ^d Mu-zí-ib-ba-sa ₄ -a <i>qar-rad</i> ^d <i>Nabû</i> (AG)
13.	[umun ^d En-zag-g]e [<i>be-lum</i> ^d <i>En-zag</i>]	^d Šid-dù-ki-šá[r-r]a <i>pa-qid kiš-^ršá^l-[ti(m)]</i>
14.	[alim-ma] [<i>kab-tu</i>] (rest of obverse broken)	umun Bàd-s[i-ab-ba ^{ki}] [<i>be-lum Bar-si-pa</i>]

Reverse

(not preserved)

Translation

1. [Important one, tur]n [to it (i.e., the city) (in pity), watch over] your city!
 2. [Turn (in pity) to Nippur], the “band” of heaven and earth, . . . [. . .]!
 3. Turn (in pity) to your [ci]ty, the brickwork of Ekur, (watch over your city)!
 4. [Import]ant one, lord of the lands, (turn to it in pity, watch over your city)!
 5. [Lord] whose utterance is reliable, Enlil, father of the land, (turn to it in pity, watch over your city)!
 6. [Important] one, lord of Nippur, (turn to it in pity, watch over your city)!
 7. [The one who is] his [own seer], bull who causes (his) troops to wander, who sleeps a false sleep, (turn to it in pity, watch over your city)!
 8. [Important one], warrior Asalluhi/Marduk, (turn to it in pity, watch over your city)!
 9. [Lord Enbilulu], foremost son of Enki/Ea, (turn to it in pity, watch over your city)!
 10. [Important one], lord of Tintir/Babylon, (turn to it in pity, watch over your city)!
 11. [Lord of the Esagi]l, Lord of the Ezida, (turn to it in pity, watch over your city)!
 12. [Important one], warrior Muduggasâ/Nabû, (turn to it in pity, watch over your city)!
 13. [Lord Enza]g, Šiddukišarra, (turn to it in pity, watch over your city)!
 - Akk.: [Lord Enzag], the one who takes care of the univer[se], (turn to it in pity, watch over your city)!
 14. [Important one], lord of [Borsippa], (turn to it in pity, watch over your city)!
- (rest of obverse broken; reverse not preserved)

Notes

Obverse

1: The known copies of the eršemma dilmun^{ki} nigin-na have numerous variations in the first Sumerian line of the text and its Akkadian translation. The variant first lines of the different copies are listed in Maul, “Herzberuhigungsklagen,” pp. 87–88. The Akkadian version of the first line of MMA 86.11.351 remains obscure. Possibly, the first two preserved signs of the Akkadian version can be read *ḥ]i(?)-ri* (*na-as-ḥ]i-ri* for *nashir*(?). The sign following *ri* is not clear. It seems to be written over an erasure and perhaps is to be read *ma(?)-ti*.

- 2: This line is missing in the known copies of the eršemma. It is, however, almost parallel to ll. 2'-3' of the closely related text, VS 17, 55 (VAT 6427):

1'. [úr]u-zu Nibru-ta nígin-[. . .
2'. ana āli(URU)-ka Ni-ip-pu-ru na-[shiramma . . .

It is not certain how to complete the second half of MMA 86.11.351:obv. 2.

- 3: For the restoration úru-zu compare the parallels in Cohen, *Eršemma*, p. 111, l. 10 and p. 113, l. 17.
- 4ff.: A very close parallel to the litany MMA 86.11.351:obv. 8-14 occurs in the eršemma umun-mu za-e, obv. 3-16 (STT 2, 155 = Cohen, *Eršemma*, pp. 136-38 and pp. 192-94; obv. 3-6, of which CT 51, 189, and Sm 1259 rev. are duplicates. Sm 1259 and the fragment Langdon, *BL* 101 (Sm 65) may be pieces of one tablet). This prayer is addressed to Marduk. While the lines MMA 86.11.351:obv. 1-7 clearly belong to a prayer to Enlil, the following ll. 8-14 must be assigned to a litany addressed to Marduk (note that Marduk is ranked equal with Enbilulu and Nabû in this part of the prayer). Interestingly, both the eršemma umun-mu za-e addressed to Marduk and the eršemma dilmunki nigin-na addressed to Enlil could form the conclusion to the balag composition abzu pe-el-lá-àm, which was originally addressed to Enki, later also to Asalluhi (note that the duplicate to STT 2, 155, CT 51, 189:rev. 1-2 contains the conclusion of the balag composition abzu pe-el-lá-àm with the eršemma umun-mu za-e. Thus IV R² 53+:cols. i-ii 2 must also be restored [a]bzu pe-el-lá-[àm] [umun-mu za-e: ù ki-i dilmunki ni]gin-na). It is possible that MMA 86.11.351 is a mixture of the two texts, and therefore it is not improbable that MMA 86.11.351 contains the last *nishu* (with the eršemma) of the balag composition abzu pe-el-lá-àm.
- 5: It is unusual that the Emesal form ^dMu-ul-líl is rendered as ^dMIN in the Akkadian version of the line. Usually a scribe would write the Akkadian normal form in the Akkadian version, when a name of a deity was given in the Emesal form in the Sumerian version of the line. MMA 86.11.351:obv. 5 should have had ^dEn-líl instead of ^dMIN.
- 7: By oversight, am has not been translated in the Akkadian version of the text. The epithet for Enlil, am érin-na di-di, would have been translated into Akkadian either as *rīmu mudil ummānišu* or as *bēlu(m) mudil ummānišu*.
- 10: É.MIN in the Akkadian version is an error for MIN.
- 13: The epithet of Nabû ^dŠid-dù-ki-šár-ra might also have been rendered as *pāqid šamē u eršetim* (see CAD K, pp. 458-59 s.v. *kiššatu* A), in contrast to our text.

No. 14

Collection of Eršemmas (nos. 45, 59, 53)

Introduction

The tablet MMA 86.11.288, to which the small fragment MMA 86.11.557 has been joined, is almost completely preserved. Only the upper left corner is missing. MMA 86.11.288+ contains three so-called ritual eršemmas¹ and refers to seven additional ritual eršemmas that were not written out. These eršemmas are called ER.ŠÈM.MA^{meš} KI.DU.DU^{meš} in the catalogue IV R² 53+:col. iii 1, while MMA 86.11.288+ describes them as ér-šem₄-kù-ga-meš in rev. 27. Unlike the eršemma prayers that were sung as the conclusion of a balag prayer,² the ritual eršemmas were independent songs that were performed during a ritual event.³ Our tablet belongs to a series of several tablets with ritual eršemmas.⁴ Unfortunately, the series number of the tablet, which would originally have been noted in rev. 27, has not been preserved. At least one more tablet followed in this series,⁵ which existed in the library of the Nanna-ù-tu family in Babylon. The lower left corner of the tablet referred to in the catch-line of MMA 86.11.288+ is now in the Vorderasiatisches Museum in Berlin.⁶ The sequence of eršemmas in MMA 86.11.288+ deviates from the order of tablets indicated in the catalogue IV R² 53+:col. iii 2–41, which was standard at least for Kuyunjik tablets.⁷ This may be explained on the assumption that the order of the eršemmas in MMA 86.11.288+ reflects the order in which these prayers were sung during a not otherwise defined cultic event.⁸

MMA 86.11.288 was noted by M. Cohen in *Eršemma*, pp. 143–44 (obv. 1–24),⁹ pp. 147–49 (obv. 25–33),¹⁰ and pp. 145–46 (rev. 1–18).¹¹ An exact duplicate to MMA 86.11.288+, with the same three eršemmas, arranged in the same order as the present tablet, was found at Uruk. This tablet, also Late Babylonian, was published by H. H. Figulla in CT 42, pls. 22–23, as no. 12 (BM 132093). In contrast to our tablet, it contains musical notations and pronunciation glosses as well as short ritual instructions.¹² The eršemma i-lu-ke₄ i-lu-ke₄ (obv. 25–33) addressed to the goddess Innin is also known from the tablets MLC 382 and MLC 923. The third eršemma, kur-gal a-a ^dMu-ul-líl (rev. 1–18), addressed to Enlil, also occurs on a large eršemma tablet from Ashurbanipal's library at Nineveh.¹³ The three eršemmas on MMA 86.11.288+ mainly contain lists of divine epithets and the so-called ‘heart-pacification unit’¹⁴ typical for eršemmas dating to the first millennium B.C.

1. ER.ŠÈM.MA^{meš} KI.DU.DU^{meš}. Cf. the catalogue of Emesal songs (balag, eršemma; ER.ŠÈM.MA^{meš} KI.DU.DU^{meš}, šuilla) IV R² 53+. IV R² 53 (K 2529) is now joined with the fragments Langdon, *BL* 103 (K 3276) and K 16853 (unpublished; join: R. Borger). The ritual eršemmas are listed there in col. iii 2–41 and in the duplicate Langdon, *BL* 151:2–5 (cf. also Krecher, *Kultlyrik*, p. 23). The not yet published small tablet K 2 (see C. Bezold, *Catalogue of the Cuneiform Tablets in the Kouyunjik Collection* 1 [London, 1889], p. 1; IV R², Pinches, “Additions and Corrections,” p. 10 to IV R² 53; and W. W. Hallo, “On the Antiquity of Sumerian Literature,” *JAOS* 83 [1963], p. 169) contains a catalogue of ritual eršemmas addressed to goddesses (K 2 is a duplicate to IV R² 53+:col. iii 27–41).

2. Evidence that the eršemma prayers were sung can be found in *CAD Z*, pp. 37–38 s.v. *zamāru*. CT 42, 12:obv. 28 (cf. Cohen, *Eršemma*, p. 41) expressly states the fact.

3. Cf. Maul, “Wenn der Held,” p. 312 with n. 5.

4. See the catch-line rev. 26.

5. See the catch-line on the present text, rev. 26.

6. SBH 76 (VAT 311); see the edition of Maul, “Wenn der Held,” pp. 312–34.

7. Two tablet series of ritual eršemmas are known from Nineveh. The catch-lines on these tablets show that the order of the eršemmas was the same as in the catalogue IV R² 53+:col. iii 2–41. A fragment of the first tablet in the series of ritual eršemmas

addressed to gods is preserved in Langdon, *BL* 63 (see Langdon, *BL* 63:9 [tablet: 10']): [DUB.1.KAM*.MA ÉR.S]ÈM.MA KI.DU.DU^{meš}. K 3506 (see Cohen, *Eršemma*, pp. 113–17 and pp. 145–46) + 83–1–18, 444 (*Eršemma*, pp. 145–46) with the eršemmas IV R² 53:col. iii 22 and 23, also belong to this series. Furthermore, the ritual eršemmas, addressed to goddesses and listed in IV R² 53:col. iii 27–41, were also grouped together in a separate tablet series (see K 11577 [unpublished]:col. ii 5': [DUB.2.KAM*.MA ÉR.SÈM.MA K].DU.DU^{meš d}Innin-ke₄). The catch-line in this tablet (K 11577:col. ii 4') reads: [...] si ù-u₈-a in-di tu-ra. It is identical with the first line of tablet Rm 2, 146 (see T. Bauer, *Das Inschriftenwerk Assurbanipals vervollständigt und neu bearbeitet* [Leipzig, 1933], p. 123) + 79–7–8, 87 (Cohen, *Eršemma*, p. 11 with n. 67) + 79–7–8, 166 (Langdon, *BL* 17): in-di tu-ra in-[di tu-ra ñb-si ù-u₈-a in-di tu-ra]. Rm 2, 146+ is the third tablet in the series that offers the ritual eršemmas addressed to goddesses. See Langdon, *BL* 17, 4 (= Rm 2, 146+:rev. 5'): DUB.3.KAM*.MA ÉR.SÈM.MA KI.¹DU¹[DU^{meš d}Innin-ke₄].

8. Evidence for the function of the eršemmas collected on this tablet can be found in the ritual directions on the duplicate CT 42, 12:obv. 28 (cited in Note 2 above).

9. See also Cohen, *Eršemma*, pp. 194–96.

10. See also Cohen, *Eršemma*, p. 196.

11. See also Cohen, *Eršemma*, p. 196.

12. See CT 42, 12:obv. 28 and the parallels from MLC 382 cited by Cohen in *Eršemma*, p. 41.

13. K 3506 + 83–1–18, 444 (see Cohen, *Eršemma*, pp. 145–46 and Note 7 above).

14. Cf. Cohen, *Eršemma*, pp. 21–28, 39.

14.

MMA 86.11.288 + MMA 86.11.557

Plates 24, 25

H. 86 mm W. 48 mm Th. 15 mm

Collection of Eršemmas (nos. 45, 59, 53)

Seleucid or Arsacid period (Babylon)

Obverse

1. [ur-sag Ut-u ₁₈ -lu]	[a-ma-ru na-nam]
2. [alim-ma]	[ur-sag] Ut-u ₁ [₈ -lu]
3. [umun-irigal-la]	[u]r-sag iri[gal(?)-la]
4. [umun Kiški-a-ta]	umun é-dub-ba
5. [umun é-me-te-u]r-sag	umun é-u ₆ -n[i]r-ki-[tuš-maj] _h
6. [^d giš]g-alim-ma-ra	gišig-gu-nu-[r]a
7. [umun ^d]Sukkal-mah-àm	sukkal ^d Pap-sukkal
8. [ur]-sag dili mah-àm	ur-sag ^d Lú-ḥu[š]-àm
9. [al]jim-ma	ur-sag Ut-u ₁₈ -lu
10. an-gin ₇ ki-gin ₇	rib-ba-zu-dè
11. ur-sag ki-bal	di-da-zu-dè
12. u ₄ šà-ab ḥun-e-ta	u ₄ bar ḥun-e-ta
13. šà ur-sag gal	šà-ab ḥun-e-ta
14. šà Ut-u ₁₈ -lu	šà-ab
15. šà umun ^d Di(?)kud-mah-àm	šà-ab
16. 'šà ^d Ba ¹ -ba ₆ nu-nus sa ₆ -ga	šà-ab
17. šà Gašan-tin-lu-ba	šà-ab

18.	šà gašan ī-si-in ^{ki} -ām	šà-ab
19.	šà Gašan-KA-UR-a-sì-ga-ke ₄	šà-ab
20.	šà gašan-mu ^d Na-na-a	šà-ab
21.	égi gašan Ḫur-sag-kalam-ma	šà-'ab ¹
22.	égi gašan é-tùr-kalam-ma	šà-ab
23.	égi gašan Tin-tir ^{ki} -ra	šà-ab
24.	ér-še₄-ma	^d Nin-urta-kam*
25.	i-lu-ke ₄ i-lu-ke ₄	i-lu na-ám-in-ra
26.	mu-gi ₁₇ -ib i-lu-ke ₄	i-lu(-)
27.	mu-gig an-na 4 MU ^{meš} GU ₄ .UD ^{meš}	gašan-an-na-ke ₄
28.	^d Na-na-a	dumu-sag é-a-ke ₄
29.	mu-gi ₁₇ -ib i-lu-ke ₄	i-lu(-) «x»
30.	u ₄ šà-ab ḥun-e-ta	u ₄ bar ḥun-e-ta
Lower Edge		
31.	[šà-ab] ur-sag gal «x»	šà-ab ḥun-e-ta
32.	égi gašan-Tin-tir ^{ki} -ra	šà- 9 MU ^{meš} GU ₄ .UD ^{meš}
33.	ér-še₄-ma	^d +En-líl (read: ^d +Innin-ke ₄)
Reverse		
1.	kur-gal a-a ^d Mu-ul-líl	zag-dib-ba(-)NE-ra
2.	a-a ^d Mu-ul-líl-lá	umun kur-kur-ra
3.	a-a ^d Mu-ul-líl-lá	umun ^d dug ₄ -ga-zi-da
4.	umun ka-nag-gá	sipa sag-gí ₆ -ga
5.	a-a ^d Mu-ul-líl-lá	i-bí du ₈ ní-te-na
6.	a-a ^d Mu-ul-líl-lá	am érin-na di-di
7.	umun ka-nag-gá	ù lul-la ku-ku
8.	umun Ki ^{ki} -a-ta	umun é-dub-ba
9.	umun é-TE-ME-ur-sag	umun é-u ₆ -nir-ki-tuš-mah
10.	^{d,gíš} Ig-alim-ma	gíšig-gu-nu-ra
11.	umun ^d Sukkal-mah-ām	sukkal ^d Pap-sukkal(!) (tablet: RA)
12.	ur-sag dili mah-ām	ur-sag ^d Lú-ḥuš-ām
13.	an-gin ₇ (!) (tablet: NA) ki-gin ₇	[r]ib-ba-zu-dè
14.	ur-[s]ag ki-bal	di-da-zu-dè
15.	u ₄ šà-ab ḥun-e-ta	u ₄ bar ḥun-e-ta
16.	šà-ab ur-sag-gal	šà-ab ḥun-e-ta

Translation

Obverse

1. [The warrior Utulu is indeed a flood!]
 2. [The important one, the warrior] Utu[lu] (is indeed a flood)!
 3. [The Lord-of-the-Underworld], the warrior [of the] under[world], (is indeed a flood)!
 4. [The lord of Kiš], the lord of the Edubba, (is indeed a flood)!
 5. [The lord of the Emete'u]rsag, the lord of the E'unirki[tušma]ḥ, (is indeed a flood)!
 6. [I]galima, the pretty door, (is indeed a flood)!
 7. [The lord] Sukkalmaḥam, the vizier Papsukkal, (is indeed a flood)!
 8. [The war]rior who alone is august, the warrior Luḥušam, (is indeed a flood)!
 9. [The im]portant one, the warrior Utulu, (is indeed a flood)!
 10. When you are as surpassing as heaven (and) as earth, (you are indeed a flood)!
 11. Warrior, when you march against the hostile land, (you are indeed a flood)!

 12. Storm, (your) heart be pacified; storm, (your) mood be pacified! (He is indeed a flood!)
 13. The heart of the great warrior, (his) heart be pacified! (Storm, your mood be pacified! He is indeed a flood!)
 14. The heart of Utulu, (his) heart be pacified! (Storm, your mood be pacified! He is indeed a flood!)
 15. The heart of the lord Dikudmaḥam, (his) heart be pacified! (Storm, your mood be pacified! He is indeed a flood!)
 16. The heart of Baba, the goodly woman, (her) heart be pacified! (Storm, your mood be pacified! He is indeed a flood!)
 17. The heart of Nintinugga, (her) heart be pacified! (Storm, your mood be pacified! He is indeed a flood!)

18. The heart of the Lady-of-Isin, (her) heart be pacified! (Storm, your mood be pacified! He is indeed a flood!)
 19. The heart of Nin-KA-UR-a-sì-ga, (her) heart be pacified! (Storm, your mood be pacified! He is indeed a flood!)
 20. The heart of my lady Nanâ, (her) heart be pacified! (Storm, your mood be pacified! He is indeed a flood!)
 21. The heart of the lady of Hursagkalamma, (her) heart be pacified! (Storm, your mood be pacified! He is indeed a flood!)
 22. Princess, lady of Eturkalamma, (her) heart be pacified! (Storm, your mood be pacified! He is indeed a flood!)
 23. Princess, lady of Tintir (Babylon), (her) heart be pacified! (Storm, your mood be pacified! He is indeed a flood!)

 24. It is an eršemma of Ninurta.

 25. She of lament, she of lament cried out a lament.
 26. The hierodule, she of lament (she of) lament (cried out a lament).
 27. The hierodule of heaven/of An, Inanna, (she of lament, she of lament cried out a lament). Four lines skipped.
 28. Nanâ, foremost child of the house (she of lament, she of lament cried out a lament).
 29. The hierodule, she of lament (she of) lament (cried out a lament).
-

Lower Edge

30. Storm, (your) heart be pacified; storm, your mood be pacified! (She of lament . . .)
 31. The he[a]rt of the great warrior, (his) heart be pacified! (Storm, your mood be pacified! She of lament . . .)
 32. Nine lines skipped. Princess, lady of Tintir (Babylon), (her) heart (be pacified! Storm, your mood be pacified!
She of lament . . .)

 33. It is an eršemma of Innin(!).
-

Reverse

1. Great Mountain, father Enlil, unsurpassed one, in lament!
2. Father Enlil, Lord of the Lands (unsurpassed one, in lament)!
3. Father Enlil, Lord Whose Utterance Is Reliable, (unsurpassed one, in lament)!
4. Lord of the land (Sumer), shepherd of the black-headed people (unsurpassed one, in lament)!
5. Father Enlil, the one who inspects himself (unsurpassed one, in lament)!
6. Father Enlil, bull who causes (his) troops to march (unsurpassed one, in lament)!
7. Lord of the land (Sumer) who sleeps a false sleep, (unsurpassed one, in lament)!
8. Lord of Kiš, lord of the Edubba (unsurpassed one, in lament)!
9. Lord of the Emēt'ursag, lord of the E'unirkitušmaḥ (unsurpassed one, in lament)!
10. Igalima, the pretty door (unsurpassed one, in lament)!
11. Lord Sukkalmaham, vizier Papsukkal (unsurpassed one, in lament)!
12. Warrior who alone is august, warrior Luḫušam (unsurpassed one, in lament)!
13. When you are as surpassing as heaven (and) as earth (unsurpassed one, in lament)!

14. Warrior, when you march against the enemy country (unparalleled one, in lament)!
-
15. Storm, (your) heart be pacified, storm (your) mood be pacified!
16. The heart of the great warrior (his) heart be pacified! (Storm, your mood be pacified!)
17. Princess, lady of Tintir (Babylon) (her) heart (be pacified! Storm, your mood be pacified!) [Nine] lines skipped.
-
18. It is an eršemma of Enlil.
-
- | | |
|---|------------------|
| 19. Warrior Utulu, | not written down |
| 20. Warrior, devastating flood, | not written down |
| 21. She causes the heaven to rumble. | not written down |
| 22. [Impor]tant one, turn (to it = [the city] in pity). | not written down |
| 23. [House, the he]art (of the god?) be pacified. | not written down |
| 24. [.....]. . . | not written down |
| 25. [.....]. . . | not written down |
-
26. [When the warrior sets out, he is a floo]d devastating the hostile land.
-
27. [xth tablet (of the series)] Holy Eršemmas of the [Gods]
28. [.....] . . .
(remainder of reverse, [ca. 2 lines] broken)

Notes

Obverse

- 1: This ritual eršemma, ur-sag ^dUt-u₁₈-lu, is listed in the catalogue IV R² 53+:col. iii 12. Another ritual eršemma with the same title also exists (see below, Note to rev. 19). The eršemma ur-sag ^dUt-u₁₈-lu addressed to Ninurta could also form the conclusion to the balag composition nir-gál lú è/e-NE. This balag was combined with the eršemma umun úru-mu in-di-bi mah-a, according to the catalogue IV R² 53+:cols. i-ii 31, but during the spring festival at Aššur in the reign of Ashurbanipal the eršemma ur-sag ^dUt-u₁₈-lu followed the balag nir-gál lú è-NE (see Maul, “Frühjahrsfeierlichkeiten,” p. 403, :obv. 23’: [Diš UD.2]6.KAM* nir-gál lú e-NE ÉR ur-sag ^dUt-u₁₈-lu ÉR.ŠÈM.MA ana Aššur(AN.ŠÁR) ina bēt(É) §[i(!)-it Šamši] and Maul, “Frühjahrsfeierlichkeiten,” p. 402, 4’: [nir-gá]l lú e-NE ÉR ur-sag ^dUt-u₁₈-lu ÉR.ŠÈM.MA ana Aššur ina É-šár-ra(?)]. This eršemma was also sung with the balag nir-gál lú è-NE in another ritual in which the king took part, but whose precise function is unknown (see K 5260+:5’-6’ (Maul, “Herzberuhigungsklagen,” p. 53). Furthermore, the eršemma is cited in the catalogue VS 10, 216:rev. 16, and in van Dijk, *Texte aus dem Rēš-Heiligtum*, p. 37, 15:10’ (here also combined with the balag nir-gál lú e-NE). This eršemma was to be sung “monthly on the third day before dusk in the shrine of the goddess Tašmētum,” according to the ritual instructions in the duplicate CT 42, 12:obv. 28: *i-na ITI UD.3.KAM* la-am KIN-SIG ina É pa-pa-hi ^dTaš-me-tum iz-za-[mur]* (see also the parallels from MLC 382 cited by Cohen in *Eršemma*, p. 41).

- 2: The glosses in the duplicate CT 42, 12:obv. 5 (L.E.: ^U *e-ma-ru-u*; in the following lines MIN alone occurs instead of ^U *e-ma-ru-u*) and obv. 25 (^A *u₄ bar hun-ge₂₆-e-ta^A e-ma-ru-u na-[nam]*) show that the refrain was repeated in ll. 2ff. (in our text divine epithets alone occur) as well as in the “heart-pacification unit,” ll. 12–23.
- 3: Umun-irigal-la is the Emesal form of the name Nergal (see MSL 4, p. 9, 106). Nergal is among the gods who are identified with Ninurta in the Emesal litanies (see Maul, “Wenn der Held,” p. 320).
- 4: The main deity of Kiš, Zababa, was worshipped in the temples Edubba and Emete’ursag and its temple tower E’unirkitušmah. Here he is equated with Ninurta (for the gods ranked equally with Ninurta in the Emesal litanies see the table in Maul, “Wenn der Held,” p. 320). In his commentary to this line Cohen (*Eršemma*, p. 195) proposes that the peculiar orthography Kiš^{ki}-a-ta is a play on the Akkadian word *kisšatu*, “universe.”
- 6: The postposition *ra*, the function of which is uncertain here, is missing in the parallel l. rev. 10.
- 10–11: Compare the parallel lines IV R² 30:1 (now + K 17646, joined by W. G. Lambert) obv. 6–9, where there is an Akkadian interlinear translation to ll. 10–11:

6. an-gin ₇ ki-gin ₇ : an ki-gin ₇	rib-ba-zu-dè
7. a-na : šá ki-ma šamê(AN) ^e ù eršetim(KI) ^{tim}	šu-tu-qá-ta
8. ur-sag ki-bal-a	di-da-zu-dè
9. qar-ra-du ana māt(KUR) nu-kúr-tim	ina : ana a-la-ki-ka

- 12: The translation of this line is uncertain. The duplicate to the eršemma *i-lu-ke₄ i-lu-ke₄* used by Cohen in *Eršemma*, pp. 147–49 (MLC 382), has a fragmentary Akkadian translation, [. . .] *u-mu lu nu-úh*, where *u* may perhaps stand for *u₄(?)* (see Cohen, *Eršemma*, p. 147 and pp. 195–96).
- 15: ^dDi- is probably written over a not completely erased erasure.
- 16: Lines 16–23 mention the various manifestations of the consort of Ninurta (see the tables in Maul, “Wenn der Held,” p. 320).
- 17: Gašan-tin-lu-ba is the Emesal form of the name of the goddess Nin-tin-ug₅-ga.
- 25: Both the list of ritual eršemmas addressed to goddesses (IV R² 53+:col. iii 27–41) and the duplicate K 2 have two prayers with the same title: *i-lu-ke₄ i-lu-ke₄* (IV R² 53+:col. iii 30 and 35; K 2, 4, and 9). Thus, two different eršemmas existed with the same incipit, a fact not taken into account by Cohen in *Eršemma*, p. 11 no. 59 and pp. 147–49, who, in contrast, observed on p. 147 top that the text exists in two different recensions: “There are two different recensions of eršemma no. 59. Although both contain the same opening unit, the heart-pacification unit differs.” In his treatment of the eršemmas (Cohen, *Eršemma*, pp. 147–49, 196; see also p. 11 no. 59 with n. 64), Cohen used the duplicate MLC 382, to which this author has not had access. Another unpublished duplicate (MLC 923) exists according to S. N. Kramer, “Additions and Corrections to *Studia Orientalia*, Vol. 46,” StOr 48 (1977), p. 4 (not mentioned by Cohen). The eršemma is listed in the catalogue BM 23701 (S. N. Kramer, “Two British Museum iršemma ‘Catalogues,’” StOr 46 [1975], p. 152, no. 6) as 1 *i-lu-ke₄*.

Cohen translates *i-lu -ra* as “to strike up a lament.” *ra* as a verb meaning “to cry loudly” is known from *gù -ra = šasû*, “to shout.” The duplicate CT 42, 12 supplies *i-lu-ke₄* with the pronunciation gloss *i-lu-ú-ú-ak-ke-e* (obv. 30; cf. also obv. 33, L.E.: *i-lu-u-ak-ke-e*) and *i-lu-na-a-ám-in-[ra]* with *i-lu-u na-gi-in-e-ra-a* (obv. 30).

- 27: The “four skipped lines” are written out in the duplicate CT 42, 12:obv. 33–36:

kur gul-gul	gašan Ḫur-sa[g-kalam-ma-(ke ₄)]
an al-dúb-ba	gašan é-t[ür-kalam-ma-(ke ₄)]
^d Líl-lá-en-na	gašan [tür amaš-a-ke ₄]
ama é-a	D[a(?)-da nu-nus sa ₆ -ga]

- 30: Probably the entire first line of the eršemma was repeated in the so-called “heart-pacification unit.” See the gloss in the duplicate CT 42, 12:obv. 33 L.E.
- 32: The “nine lines skipped” are identical with MMA 86.11.288+:obv. 14–22 and were therefore not repeated here.

Reverse

- 1: The ritual eršemma kur-gal a-a ^dMu-ul-líl is listed in the catalogue IV R² 53+:col. iii 23. This eršemma could also form the conclusion to the balag composition dè-em-mar dè-em-mar (Maul, “*Herzberuhigungs-klagen*,” p. 54, l. 14’). It is edited by Cohen in *Eršemma*, pp. 145–46 and p. 196 (Cohen’s copies B [K 3506] and D [83–1–18, 444] have since been joined by R. Borger). The duplicate CT 42, 12 has the refrain zag-dib-ba a-nir-ra instead of zag-dib-ba (-) NE-ra (CT 42, 12:rev. 33). CT 42, 12:rev. 21 and 24 L.E. also provide the pronunciation gloss *zag-ga-dib-ba-a-ni a-ši-ir-ra-(a)*. The translation here follows CT 42, 12.
- 2–7: For the seven standard epithets of Enlil in ll. 2–7 see R. Kutscher, *Oh Angry Sea (a-ab-ba hu-luh-ḥa): The History of a Sumerian Congregational Lament*, YNER 6 (1975), pp. 46 and 47–51, and Maul, “*Herzberuhigungs-klagen*,” pp. 94–95.
- 3: The epithet for Mullil/Enlil umun dug₄-ga-zi-da is a fixed combination in which AN is read as the divine determinative. The scribe understood dug₄-ga-zi-da to be a regular name for Enlil.
- 6: am is rendered *bēlu*, “lord,” instead of *rīmu* in some Akkadian interlinear translations of this line; see Maul, “*Herzberuhigungs-klagen*,” pp. 94, 395, and 396 (s.v. am érin-na di-di).
- 17: The “nine lines skipped” are identical with obv. 14–22 and are therefore not repeated here.
- 19: The ritual eršemma listed here with the title ur-sag ^dUt-u₁₈-lu has a notation saying “not written down.” This indicates that there must have been another eršemma addressed to Ninurta with the same title in addition to the one preserved on the obverse of the tablet. This has not been recognized previously.
- 20: This eršemma is listed in the catalogue IV R² 53+:col. iii 4: ur-sag úru ur₄-[ur₄]). A šuilla addressed to Marduk with the same incipit (see IV R² 53+:col. iv 55), [ur-sag úru u]r₄-ur₄ šá ^dMarduk(AMAR.UTU), was recently edited by J. S. Cooper, “Warrior, Devastating Deluge, Destroyer of the Hostile Lands; A Sumerian Šuila to Marduk,” in Leichty et al., *A Scientific Humanist*, pp. 83–93. The tablet mentioned by Cohen in *Eršemma*, p. 9, n. 50, is this šuilla and not the eršemma that begins with the same line.
- 21: This eršemma, certainly addressed to Innin/Ištar, is listed in IV R² 53+:col. iii 36. A copy of the text of this prayer has not yet been discovered.
- 22: The ritual eršemma dilmun^{ki} nigin-na is listed in the catalogue IV R² 53+: col. iii, l. 22. Cohen edited this prayer in *Eršemma*, pp. 110–12 (with pp. 184–85) and pp. 113–17 (with pp. 185–86). This eršemma could also form the conclusion to the balag composition abzu pe-el-lá-àm (see IV R² 53+:cols. i–ii 2) and to the canonical as well as the noncanonical version of the balag umun še-er-ma-al-la an ki-a (see IV R² 53+:cols. i–ii 24 and 39). dilmun^{ki} nigin-na is furthermore incorporated as the prayer section in the balag compositions mu-tin nu-nus dím-ma (the second tablet) and am-e bára an-na-ra. The ritual eršemma dilmun^{ki} nigin-na is prescribed for recitation in *RAcc*, p. 34, l. 13, p. 40, l. 11, and probably also p. 44

(BE 13987), l. 11 (restored). Cohen edited this prayer in *Eršemma*, pp. 110–12 and 113–17; see also p. 7 no. 1 with nn. 21–24.

Only three of the copies listed by Cohen, *Eršemma*, pp. 110 and 113 belong to the ritual eršemma dilmun^{ki} nigin-na:

BM 29623 (CT 15, pls. 12–13)

K 2789 + K 3895 (Langdon, *BL* 167) + K 4964 + K 4966 + K 13567 (Langdon, *BL* 142) + K 14918, a large tablet with the following eršemmas: Cohen, *Eršemma* 1 (dilmun^{ki} nigin-na); Eršemma 160 (edited by Cohen, *Eršemma*, pp. 127–30), and Eršemma 153 (see Cohen, *Eršemma*, p. 15 no. 153 with n. 96).

K 3506 + 83–1–18, 444 = (Cohen, *Eršemma*, pp. 145–46); this large eršemma tablet contains the eršemmas dilmun^{ki} nigin-na and kur-gal a-a ^dMu-ul-líl (= IV R² 53+:col. iii 23).

The copies Langdon, *BL* 80, 93 + 144 and Sm 47 are too fragmentary to determine whether they belong to a balag series or to tablets with ritual eršemmas. IV R² 28* 4 (K 2003 + 3466) + 4985 + 5320 + 7900 with indirect joins K 10680 and K 13471 (R. Borger); K 8646; *SBH* 46 and K 8514 (unpublished; not mentioned by Cohen) all belong to the second tablet of the balag mu-tin nu-nus dím-ma (IV R² 53+:cols. i–ii 11). Sm 528 and *SBH* 70 + 85 + VAT 1803 belong to the balag am-e bára an-na-ra (IV R² 53+:cols. i–ii 14). VS 17, 57 does not belong to the eršemma dilmun^{ki} nigin-na (contrary to Cohen); only some lines of the text are parallels to part of the eršemma.

- 23: This ritual eršemma is listed as é šà-ab ḥun-ge₂₆-ta in the catalogue IV R² 53+:col. iii 11. In the cultic calendar for the spring festival at Aššur it is always cited without a classification (see Maul, “Frühjahrsfeierlichkeiten,” p. 402, l. 8’, p. 405, l. 24’, and p. 406, ll. 11 and 17. Unfortunately, no copy of this prayer has been found. According to the instructions in the cultic calendar K 2724+ this prayer was sung by the *kalū* when a god was reinstalled in his own shrine or temple and had taken his seat again on his throne after a procession.
- 26: See the edition of this eršemma in Maul, “Wenn der Held,” pp. 312–34.
- 27: The restoration is taken from IV R² 53+:col. i–ii 43.

No. 15

Šuilla: nir-gál lú è-NE

Introduction

The fragment MMA 86.11.298 links the two fragments VAT 268 and VAT 443, which were published by G. Reisner in *SBH* p. 125 as no. 74. Reisner realized that the two fragments VAT 268 and VAT 443 belonged to the same tablet, but he could not join them since the middle piece that would connect them was missing. That piece is MMA 86.11.298. The three fragments can now be joined to comprise the upper portion of a tablet with almost no gaps (see the drawings on page 105). The tablet is not completely regular in shape, and it is therefore difficult to determine its original size from the curvature. By l. 8 we seem to have reached the middle of the tablet, which would mean that we

have more than half of the tablet preserved. MMA 86.11.298+ was written by the young scribe Bēl-apla-iddin¹ before he became accomplished. He probably copied this text from a tablet in the collection of Bēlšunu as a scribal exercise.² Many errors in this copy attest to the inexperience of a student scribe.³ He used the script ordinarily employed for writing economic and administrative texts, which he had already mastered,⁴ instead of the clearer, upright, archaizing script in which literary texts from the Seleucid-Arsacid period were often written. Presumably, he had yet to learn that script.⁵ The earliest dated tablet from the Nanna-ù-tu family library written by Bēl-apla-iddin is from year 129 B.C., when Bēl-apla-iddin had already taken the place⁶ of his older brother Marduk-zēr(a)-ibni⁷ as *kalū* apprentice (*galaturru*).⁸ MMA 86.11.298+ may have been written at this time, or possibly even earlier.⁹

MMA 86.11.298+ contains the šuilla *nir-gál lú è-NE*, addressed to Ninurta.¹⁰ It was probably listed in the catalogue IV R² 53+¹¹ in the section containing the Sumerian šuilla prayers. In IV R² 53+:col. iv 1–6, where the list of šuilla prayers addressed to Ninurta occurred, the incipits unfortunately have not been preserved. The title of this šuilla, *nir-gál lú è-NE*, should be restored in one of those lines. In addition to our šuilla, there existed a balag composition¹² and an eršemma¹³ beginning with the same line. No duplicates of the šuilla edited here are known.¹⁴

1. Cf. *SBH* 74:rev. 11.

2. Cf. *SBH* 74:rev. 9. This Bēlšunu is probably the same Bēlšunu who owned several tablets (*SBH* 24, 26, and I) written about 156 B.C. (see *SBH* 26:rev. 13–14). These tablets thus originated approximately twenty-seven years before the first attested activity of Bēl-apla-iddin and came into the possession of the Nanna-ù-tu family. The tablets were acquired by the Vorderasiatisches Museum, Berlin, together with the tablets from the Nanna-ù-tu family library. That there was a connection between the Bēlšunu family and the members of the Nanna-ù-tu family is evidenced by *SBH* 75:rev. 9.

3. The young Bēl-apla-iddin was not yet expert at the custom of writing literary tablets so that the last sign of each line was written next to the right-hand edge. The erasures on the right-hand third of the obverse of the tablet (*SBH* 74:obv. 5, 6, 8, 10) show that the scribe did first write up to the right-hand edge. But he then erased the last signs he had written in lines *SBH* 74:obv. 5, 6, 8, and 10, and then wrote them next to the right-hand edge of the tablet. It is somewhat unusual for a Seleucid-Arsacid tablet with a Sumerian-Akkadian text to have dividing lines between the double-lines.

4. When he wrote tablet MMA 86.11.298, Bēl-apla-iddin should have finished his basic school curriculum, which for example is documented in the Neo-Babylonian school texts published by O. R. Gurney in *OECT* 11 (see also S. M. Maul, review of *OECT* 11, *BiOr* 48 [1991], pp. 852–60).

5. Years later as an experienced scribe, Bēl-apla-iddin had mastered this elegant script (see e.g., *SBH* 10, 19, 45). Bēl-apla-iddin became the head of the family library as the *kalū*, no doubt after the death of his father Ea-balāssu-iqbi, at the latest in January of 91 B.C. (cf. *SBH* 3:rev. 18 and 20).

6. See the introduction to text No. 12.

7. VAT 1789 (unpublished; cf. *SBH* p. xiv and Oelsner, "Randbemerkungen zur arsakidischen Geschichte," p. 45), obv. 6'.

8. *SBH* 25:rev. 27 and 29.

9. Contrary to the copy of G. Reisner, *SBH* 74 was not written on the 10th of Addaru (*itīšE*) but on the 10th of Kislīmu (*itīGAN!*).

10. Contrary to Cohen, *Eršemma*, p. 10, n. 51, *SBH* 74 does not belong to the eršemma *nir-gál lú è-NE*.

11. See p. 41, Note 36'.

12. See IV R² 53+:cols. i–ii 31 and also above text No. 4, pp. 31–41, for an edition of the copy of the second *nishu* of this balag (MMA 86.11.349+). The balag *nir-gál lú è-NE* was edited by Cohen in *CLAM* 2, pp. 468–78; the tablet used there as B (see p. 468) is actually the eršemma with the same title (see the next note).

13. IV R² 53+:col. iii 6. The beginning of the eršemma has been preserved in K 4956 + K 5224 (Langdon, *BL* 9a). The catch-line of that text (rev. 4') refers to the next eršemma in the catalogue IV R² 53+ (col. iii 7). The tablet K 4956+ does not belong to the balag composition *nir-gál lú è-NE* (contrary to Cohen, *CLAM* 2, p. 468). Only this tablet of those given by Cohen, *Eršemma*, p. 10 n. 51, belongs to the eršemma *nir-gál lú è-NE*. K 9315 (Langdon, *BL* 9b), as well as *KAR* 305, contain the introduction to the balag composition *nir-gál lú è-NE*. *SBH* 74 is the šuilla with the same incipit edited here.

14. For the Sumerian šuilla prayers see most recently J. S. Cooper, "Warrior, Devastating Deluge, Destroyer of Hostile Lands: A Sumerian Šuila to Marduk," in Leichty et al., *A Scientific Humanist*, pp. 83–93. Another šuilla addressed to Enlil, hitherto partly unknown, has been published recently by O. R. Gurney in OECT 11 as 16 (+) 17. It is listed in the Catalogue (p. 6) as an eršaḥunga prayer, but it is very clearly a šuilla, as shown by the refrain (only very fragmentarily preserved) in OECT 11. 17:rev.1': [umun.mu(?)] 'hun(?).gá'[hu.mu].ra'.[ab-bé], which is typical for a šuilla. This classification is confirmed by the almost completely destroyed colophon of OECT 11, 17:rev. 5': [... šu.í]l.lá [...].

15.

MMA 86.11.298 + SBH 74 (VAT 268 +

VAT 443)

Plates 26, 27

H. 73 mm W. 100 mm Th. 21 mm

Upper Edge

[ina a-mat ^d+bēli(EN) u ^dbēltī(GAŠAN)-iá liš-lim]

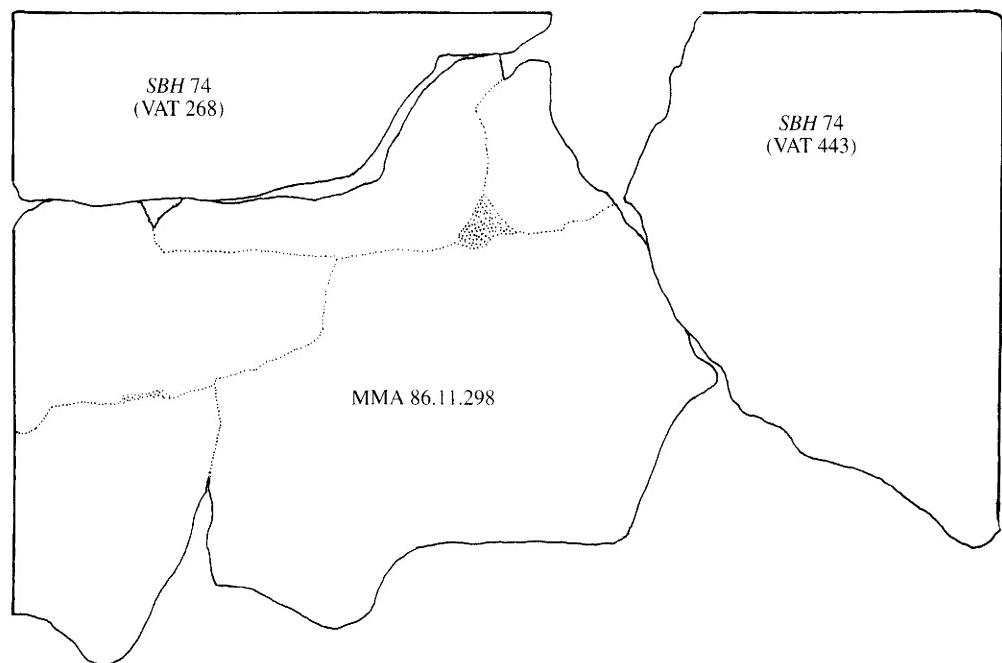
Šuilla: nir-gál lú è-NE

Seleucid or Arsacid period (Babylon)

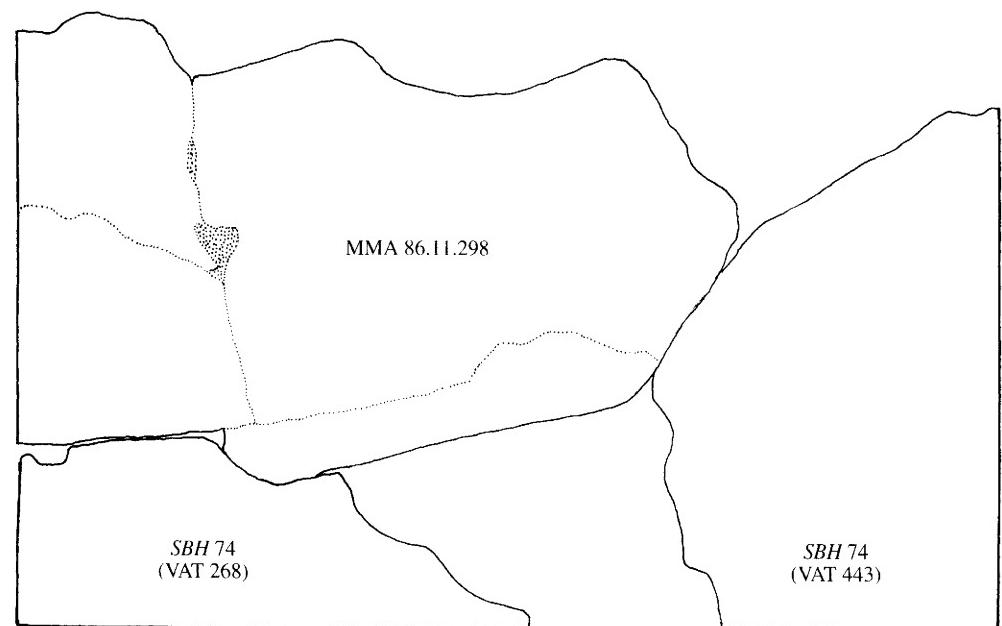
Obverse

- | | |
|---|--|
| 1. [<u>nir-gál lú è-NE</u>]
[e-tel-lu <u>ha</u> - ⁱ <u>t</u> <u>ni</u> - <u>ši</u> - <u>iš</u> - <u>š</u>]ú | [mu-LU ta-zu mu-un-zu]
'gát ¹ -t[uk man-nu <u>i-lam-mad</u>] |
| 2. [<u>alim-ma nir-gál lú è-NE</u>] | mu-LU [...]] |
| 3. [<u>alim-ma</u>] | umun ur-s[ag gal] |
| 4. 'ur-sag gal ¹ | umun-si ^d M[u-ul-líl-le] |
| 5. GAN an-na 'á ¹ -bi
e-mu ^d A-nim šá ana i-di-šú | lú la-b[a-da-te-gá]
[ma-a]m-ma la 'l-[te(tablet: MAH)-eh-hu-ú] |
| 6. kišib-lá ^d +En-líl-lá nam-kal-ga-na
mar ^d +En-líl šá dan-nu-us-[su] | [gaba ²] lú la-ba-d[a(?)-è(?)-dè]
ma-am-ma [<u>la i-mah-ha-rù</u>] |
| 7. bād-mah é-kur-ra bára-gal an ki-[ke ₄]
tu-ku[l-t]i É.MIN nar-da-ap šamē(AN) ^e u erisetim(K[I] ^{ti} m da-i-ik šadî(KUR) ⁱ | kur-ra an-g[i ₄ -gi ₄]
érim-ma(!)(tablet: BA)-šè gu[r ₅ -ru-uš búr] |
| 8. izi gar šen(?)-sen(?)-na u ₄ du ₇ -du ₇
na-pi-iḥ i-ṣat qab-lim u ₄ -mu mut-tak-pu | šá a-a-bi [<u>i-gas-GA-su</u>] |
| 9. ù-mu-un-mu 'á ¹ nam-ur-sag-gá-zu
be-lum a-n[a] i-di qar-ra-du-ti-ka | zà-zu mí hé-em-[i-i]
e-mu-qí-k[a (...)] li-ma- ² u <u>u</u> (?) |
| 10. ur-sag gal 'á ¹ nam-gir-ra-BA (read: zu)
qar-ra-d[u rabû an]a i-di gaš-ru-'ti-ka ¹ | nam-mah-zu ár-[re-eš MIN]
'nar-bi-ka ¹ [...]] |
| 11. 'ù ¹ -mu-un-[mu -k]e ₄
[be]-l[um] | [...] |
| (rest of obverse broken) | [...] |

Obverse



Reverse



Reverse

- | | |
|---|--|
| 1'. [ana] É.MIN É'(?) [.....] | [...] |
| 2'. é-šu-me-ša ₄ é-[g]al [l]a-l[a-za/zu]
ana É.MIN <i>ekal</i> (É.GAL) <i>la-li-ka</i> | [hú]l k[u ₄ -ra-zu-ta é-zu ...]
ha-diš [ina <i>erebika</i> <i>bitka</i> ...] |
| 3'. ki-maḥ ki ní-d[ú]b-bu-da-zu-dè
i-na áš-ri ši-ri aš-ri <i>tap-šu-uh-ti-ka</i> | ki kù-šè 'A' [(...) tuš-a-zu-ta é-zu ...]
šub-tú e[l-letu (...) ina ašābika ...] |
| 4'. ^d A-nun-na ub-šu-[u]kkin-na-ta
^d A-nun-na- ^r ki ¹ ina MIN-ku | bar-zu [dè-en-sed-dè]
ka-bat-ta-ka [li-šap-ši-ih] |
| 5'. dím-me-er an-na dím-me-er ki-a
ili(DINGIR) ^{meš} šá šamē(AN) ^e ili(DINGIR) ^{meš} šá erşetim(KI) ^{tim} taş-li-tú [<i>liq-bu-ú-ka</i>] | a-ra-zu d[è-ra-ab-bé] |
| 6'. dím-me-er gal-gal an ki-ke ₄ -e-ne
ili(DINGIR) ^{meš} rabûti(GAL) ^{meš} šá šamē(AN) ^e u erşetim(KI) ^{tim} be-lum nu-[uh lig-bi-ka] | umun hün-gá h[u-mu-ra-ab-bé] |
| 7'. ^r šu-ı̄l-lá | ^d N[in-urta-ke ₄] |

(remainder of MMA 86.11.298 broken; the colophon of *SBH* 74 follows)

Translation

Upper Edge: Epigraph

[At the command of the Lord and My Lady may (what I am doing) be successful.]

Obverse

1. [Noble one, the one who watches over mankind, is there someone who knows your form?]Akk.: [Noble one, the one who watches over hi]s [people, who can comprehend your] form?
 2. [Important one, noble one, the one who watches over mankind], (is there) someone [(who knows your form)]?
 3. [Important one], lord, [great] warri[or], (is there someone who knows your form)?
 4. Great warrior, city ruler of E[nlil], (is there someone who knows your form)?
 5. The . . . of An whose strength nobody [can face],
Akk.: The son-in-law of Anu whose strength no[body can face].
 6. the seal-bearer of Enlil whose power nobody can [withstand],
Akk.: the son of Enlil who[se] power nobo[dy can withstand].
 7. the “Outstanding Wall” of the Ekur, the “Great Dais” of heaven and netherworld, sma[shes] the mountains.
Akk.: the one in whom Ekur trusts, bridle of heaven and earth, the one who smashes the mountains,
 8. The one who sets ablaze (the flame of) battle, the goring day who { } the enemy,
Akk.: the one who sets ablaze (the flame of) battle, the goring day who [rages] (against) the enemies,
 9. my lord, because of your valorous strength let your power be [praised] persistently!
 10. Great warrior, because of your supreme strength (let) your greatness [(be praised) in glo]ry!
 11. [My] lord, [because of yo]ur [.] let your [.] be praised -ly!
(rest of obverse broken)

Reverse

- 1'. [When you enter joyfully] the E[kur](?), the h[ouse of your], (may) your temple (say to you: "Calm down!")])
 - 2'. [When you] e[nter] joyfully the Ešumeša, your palace full of beauty, [(may) your temple (say to you: "Calm down!")])
 - 3'. [When you seat yourself] on the august place, the place where you can repose, (Akk.: the place of your repose) on the holy place, [(. . .) (may) your temple(?) (say to you: "Calm down!")])
 - 4'. [May] the Anunna-(gods) [pacify] your mind in the Assembly Hall (ub-šu-ukkin-na)!
 - 5'. May the gods of heaven (and) the gods of the netherworld [say] a prayer [to you]!
 - 6'. May the great gods of heaven and the netherworld [say to you]: "Lord, calm down!"
-
- 7'. (It is) a šuilla of N[inurta].

(remainder of MMA 86.11.298 broken; the colophon of *SBH* 74 follows)

Notes

Obverse

- 1: The underlining of parts of the text (obv. 1–10 and rev. 4'–7') indicates traces preserved on the joined fragments VAT 268 and VAT 443.

The transliteration è-NE is preferred to è-dè here, since the variant è-NI is quite common; cf. KAR 305:rev. ii' 3; *SBH* 7:rev. 4 and TCL 6, 57 (= TCL 16, 42), rev. 16. For the variation between ni and NE(dè) see Cohen, *Eršemma*, p. 56, ll. 40–41, with commentary pp. 153–54, and Cooper, *Angim*, pp. 84, 153; also Maul, "Herzberuhigungsklagen," p. 88.

For obv. 1–4 see the introductions to the eršemmas and balags nir-gál lú è-NE, as well as the introductions to the balag compositions gu₄-ud nim (é)-kur-ra (Cohen, *CLAM* 2, p. 441) and ušum-gin₇ ní si-a-(àm) (Cohen, *CLAM* 2, pp. 457–59).

- 5: GAN = *emu* is unusual and, as far as this writer knows, not otherwise attested. (Is it possible that the inexperienced scribe wrote the sign GAN instead of dumu?) Ninurta is the consort of Gula and so the son-in-law of An(u). Contrary to Reisner's copy *SBH* 74:obv. 6 clearly reads: [la-b]a-da-te(!)-gá. *CAD M* 1, p. 115b s.v. *mahû* suggests *i-mah^{ab}-hu-ú* as the reading of the Akkadian line. However, the new context gained from MMA 86.11.298 shows that *mahû*, "to become frenzied," fits neither contextually nor with the Sumerian version of the text. Instead, one would expect *itehhû*. Since there is another erroneous Akkadian verbal form in obv. l. 8, we may assume that Bēl-apla-iddin made a mistake here too. The error (*mah* instead of *te*) may have originated from *imahharu* in the next line.
- 6: One would have expected the Emesal form mu-LU here and in the next line, instead of lú. In *Angim*, l. 93 (see Cooper, *Angim*, p. 72), and in Lugal-e, l. 236 (see van Dijk, *Lugale* 2, p. 84), Ninurta is also called the kišib-lá of Enlil (see the commentary in Cooper, *Angim*, p. 117). In both cases kišib-lá is translated *umāšu* in Akkadian. This Akkadian translation assumes that Ninurta as "avenger of his father" (Maul, "Wenn der Held," pp. 326–31) acts as the "handcuffs" of Enlil. For l. 6 see also the very similar line, *Angim*, 50 (Cooper, *Angim*, p. 62).

- 7: The striking epithet of Ninurta, bād-mahé é-kur-ra, is translated into Akkadian, in substance correctly but with the less colorful *tukulti Ekur*. Enlil is described as “the great wall of the lands” (kur-kur bād-gal-bi) in one eršemma (Cohen, *Eršemma*, pp. 122, 11; see also Cohen, *CLAM* 2, p. 584, c+484 bād gal kur-kur-ra = *dūru rabū ša mātāti*). Hammurabi of Babylon also praises himself as bād-gal ugnim-ma (see Å. Sjöberg, “Ein Selbstpreis des Königs Hammurabi von Babylon,” ZA 54 [1961], p. 52, l. 26, and p. 68). bára-gal is rendered rather freely as *nardappu* in the present text. The normal Sumerian equivalent to *nardappu* is *gišrab-mahé* (see *CAD N*1, p. 351 s.v. *nardappu*). The statement that Ninurta crushed the mountain alludes to Ninurta’s victorious fight against the *asakku* in the Lugal-e myth.
- 8: In the Akkadian version of the line *i-gaṣ-GA-ṣu* (very clear on the tablet) is certainly an error for *i-gaṣ-ṣa-ṣu*. MMA 86.11.298+:obv. 8 confirms the so far unique and remarkable equation *gur₅-ru-uš bur = kaṣāṣu*, which is known from CT 16:pl. 12, col. i 9, 11 (an-na *gur₅-ru* [missing in one copy]-*uš bí-in-bu-ru-uš = e-liš ik-ṣu-ṣu-ma*) and the duplicate UET 6/2, 392:obv. 16 (an *gu-ru-uš bi-in-bur-re-eš = e-liš ik-ṣu-ṣu-ma*). For *g/kaṣāṣu* compare further B. Landsberger, *The Date Palm and its Products According to the Cuneiform Sources*, AfO suppl. 17 (Graz, 1967), p. 34.
- 9: “My” is missing in the Akkadian version. The restoration of *l[i-ma-²u-u]* (see Lugal-e, l. 410; van Dijk, *Lugale* 1, p. 103) is not completely certain. For l. 9 see Angim, ll. 50–51, and ll. 90–91 (Cooper, *Angim*, pp. 62, 72).
- 11: “My” is missing in the Akkadian version.

Reverse

- 1': This line should have been generally parallel to the following line. Compare the closely related introduction to the šuilla to Marduk treated by J. S. Cooper, “A Sumerian Šu-íl-la from Nimrud,” pp. 51–67, esp. p. 58, ll. 1–3. Since that publication, more fragments of the Nineveh tablet have been joined (see Maul, “Herzberuhigungs-klagen,” p. 95).
- 2': Ešumeša is the name of Ninurta’s temple at Nippur. The second half-line has been restored from Cooper, “A Sumerian Šu-íl-la from Nimrud,” p. 58, ll. 1–2. The obviously abbreviated refrain here, é-zu, can be restored as é-zu ḥun-gá ḥu-mu-ra-ab-bé = *bītka nūḥ liqbika*. For this typical šuilla refrain compare Cooper, “A Sumerian Šu-íl-la from Nimrud,” p. 53 and p. 55, as well as Å. Sjöberg, *Der Mondgott Nanna-Suen in der sumerischen Überlieferung* (Stockholm 1960), p. 169 and further n. 14.
- 3': For ki ní-dúb-bu see Maul, “Herzberuhigungs-klagen,” pp. 290–91, rev. 5–6, and the commentary there, p. 295.
- 4': For ub-šu-ukkin-na see Cooper, *Angim*, pp. 115–16 with additional bibliography.
- 6': Cf. the parallel, Cooper, “A Sumerian Šu-íl-la from Nimrud,” p. 63, l. 37.

No. 16

Emesal Prayer

Introduction

MMA 86.11.285 is the lower part of a largish tablet. The precise dimensions of the complete tablet cannot be determined. It is a duplicate of *SBH* 68 and the small fragment written in Assyrian script, K 6986 (copy: Cohen, *CLAM* 2,

p. 820). MMA 86.11.285:obv. 1'–4' contains the end of a laudatory hymn to the sun god Utu. Some of the preceding lines, six to be precise, are known from *SBH* 68:obv. 1'–5'. A prayer follows (MMA 86.11.285:obv. 5'–11' = *SBH* 68:obv. 9'–15' = K 6986, ll. 3'–9') imploring the weather god Ishkur to “hold back” the “storm” ($u_4 = \bar{u}mu$), which is threatening the shrines. The third prayer is addressed to the god Martu (AN-AN-mar-tu)¹ (obv. 12'–rev. 13? = *SBH* 68:obv. 17'–rev. 13). In direct speech Martu laments the destruction of the land brought about by the enemy. An additional fourth prayer is preserved only very fragmentarily on the present tablet (rev. 14–17) as well as on the duplicate *SBH* 68:rev. 15–19). *SBH* 68 and the duplicate K 6986 were edited by M. E. Cohen in *CLAM* 2, pp. 434–35, 438, f+ 99–f+ 134. It is clear from his transliteration of line f+121 that he also used the Metropolitan Museum fragment without citing MMA 86.11.285 among his sources on p. 427. His classification of *SBH* 68 as belonging to the balag composition u_4 -dam $\bar{g}u$ dé-dé AŠ² is extremely uncertain. MMA 86.11.285 with duplicates may have been part of a collection of Emesal prayers that were unrelated to any balag.³

1. For this form of the name see Maul, “*Herzberuhigungsklagen*,” p. 182, and D. O. Edzard, “AN.AN.MAR.TU,” *RLA* 7 (1987–90), p. 437.
2. See the argument in Cohen, *CLAM* 2, p. 428.
3. Black, “Sumerian *Balag* Compositions,” pp. 31–59, does not include *SBH* 68 in his list of copies of balag compositions.

16.

MMA 86.11.285

Plate 28

H. 67 mm W. 73 mm Th. 31 mm

Obverse

1'. [še-eb é-di-kud-ta]	$'ki^1$ [(-kù-ga tu-ud-da)]
2'. [é-di-kud-kalam-ma]	$'ki^1(-)$
3'. [di-kud dìm-me-er-e]-ne	ki(-)
4'. [ka-aš bar ^d A-nun-na ^{ki} -ke] ₄ -e-ne	ki(-)
<hr/>	
5'. [u_4 gur u_4 gur i-lu i-lu] (erasure)	é àm-ma-gi ₄ e-la-lu
6'. [alim-ma]	^d Iškur dumu an-na
7'. [umun-e Tin-tir ^{ki}]	umun-e é-nam-hé
8'. [umun-e Zimbir ^k i]	umun-e é-gi ₆ -pàr
9'. [dumu-sag an-kù]-ga	u ₄ gur u ₄ gur
10'. [ka-aš bar an-a k]i-šú-a	u ₄ gur u ₄ gur
11'. [èš é-nam-hé ^d Iš]kur dumu an-na	u ₄ gur u ₄ g[u]r
<hr/>	
12'. [umun-na i-lu-e šà-sì]g-ga-ta	sipa silim-du ₁₁ àm-m[e]
13'. [alim-ma]	umun AN-AN-mar-t[u]
14'. [ur-sag gal]	^d Mar-tu dumu an-[na]

Reverse

- | | | |
|-----|---|---|
| 1. | [é-mu di-da] | úru-mu di-d[a] |
| 2. | [dam-mu di-da] | dumu-mu di-d[a] |
| 3. | [ama ₅ -mu èrim-ma-mu] | di-da |
| 4. | [mu-un-gur ₁₁ -mu a gil-sa-a]-mu | di-da |
| 5. | [a gi ₄ -in-tur-m]u gig-bi | di-da |
| 6. | [ama-a-tu-m]u pel-lá-bi | di-da |
| 7. | [ér mu-n]i-íb-bé | ér mu-un-da-šub |
| 8. | [a-še-er m]u-ni-íb-bé | a-še-er mu-un-da-šub |
| 9. | [é ba-a]n-da-gul | úru ba-an-da-gul (over: hul) |
| 10. | [tùr ba-a]n-da-gul | amaš ba-an-da-hul |
| 11. | [un lu-lu]- ^t a ¹ -ba | ba-da-gil-le-èm-mà-eš |
| 12. | [x x] x-bi | ba-bir-bir-re |
| 13. | [al-li-l]i al-li-li | a ù-u ₈ -a a ù-u ₈ -a |
| 14. | [a ù ig]i im-da-lù
[. -te(?) -er mu-da-l]i-ih šá-qú-u ina dim-ma-[tú m]u- ^t da-li-ih ¹ | a ù : igi (over: nam) im-da-lù |
| 15. | [.] x si | ka-a x [.] x |
| 16. | [.] | KAL x [.] |
| 17. | [.]
(remainder broken) | x [.] |

Translation

Obverse

- 1'. [(O) brickwork of the Edikudta], (the one, who was begotten in a pure) pl[ace],
2'. [Edikudkalamma], (the one, who was begotten in a pure) place,
3'. [the judge of the god]s, (the one, who was begotten in a pure) pl[ace],
4'. [the one, who makes decisions for the Anunna-god]s, (the one, who was begotten in a pure) pl[ace].

5'. [Turn back the storm; turn back the storm! O wail, O wail!] The house is locked up. O wailing!
6'. [Important one], Iškur, son of An /of heaven,
7'. [O lord, as for Tintir/Babylon], O lord, as for the Enamhe,
8'. [O lord, as for Sippar], O lord, as for the Egipar,
9'. [foremost son of the pu]re [An/heaven], turn back the storm; turn back the storm!
10'. [(You) who makes decisions for the tota]lity [of heaven] and earth, turn back the storm; turn back
the storm!

- 11'. [As for the shrine of the Enamhe, Iš]kur, son of An/of heaven, turn back the storm; turn back the storm!

12'. [O lord, (uttering) a wail] with a burn[ing heart], the shepherd [spea]ks a greeting.

13'. [The important one], the lord Martu,

14'. [the great warrior], Martu, the son [of] An/of heaven,

15'. [the important one], the man of the mountain,

16'. [the great warrior], Saman, the son [of] An/of heaven,

17'. [.....], the [shep]herd [spea]ks a greeting.

Reverse

1. [Speaking: “(O) my house!”]; speak[ing]: “(O) my city!”
 2. [Speaking: “(O) my spouse!”]; speaking: “(O) my child!”
 3. Speaking: “[O) my cella, (O) my treasury house!]”
 4. Speaking: “[O) my property, alas] my [jewelry]!”
 5. Speaking grievously: “[Alas, m]y [little maid-servant]!”
 6. Speaking heatedly: “[O) m]y [slave, born in (my) house]!”
 7. He [cr]ies; tears flow down therewith.
 8. He [sig]hs; sighs flow down therewith.
 9. [The house is] destroyed; the city is destroyed.
 10. [The cattle pen is] destroyed; the sheepfold is destroyed.
 11. Its (i.e., the city’s) [numerous people] have been overthrown.
 12. Its [.] have been scattered.
 13. [Wail]ing, wailing, alas, alas, woe!

 14. [Alas, woe(?)], (his) fa[ce] is gloomy; alas, woe(?), (his) face is gloomy.
 - 15–17. (too damaged for translation)
(remainder broken)

Notes

Obverse

- 1': The Babylonian translation of the refrain, *šá ina aš-ri el-lu ib-ba-nu-ú*, can be found in *SBH* 68:obv. 3.

3': The restoration of the line follows *SBH* 68:obv. 7'. On the tablet itself there are clear traces of the sign *kud* before *dīm-me-er-e-ne*. See also Maul, "Herzberuhigungsklagen," p. 136, l. 6.

5': This translation is based on the equation $gi_4 = pehū$, "lock up." Cf. *SBH* 31:rev. 12–13 (collated):

12.	me-[kal-kal(-la)]-bi	é-a àm-gi
13.	[<i>par-su-šu šu-qu-r</i>]u-ti	<i>ina bīti</i> (É) <i>pe-^rhu¹-ú</i>

7': The duplicate *SBH* 68:obv. 11' and 12' has only *umun*, instead of *umun-e*. *umun-e*, at the beginning of ll. 7' and 8', has been restored from the duplicate K 6986:5' and 6' (see the copy in Cohen, *CLAM* 2, p. 820). É-nam-hé is the name of the temple of the weather god in Babylon (see George, *House Most High*, pp. 129–30 no. 839).

11': The restoration of *èš* (transliterated as x in Cohen, *CLAM* 2, p. 434, f+115) is based on collation of the duplicate *SBH* 68:obv. 15'.

17': The restoration follows *SBH* 68:rev. 1 (collated).

Reverse

- 11: The restoration un follows *SBH* 68:rev. 12: [u]n! (collated) lu-lu-a-bi, etc. For un-lu-lu-a compare the Akkadian equivalents for un-lu-a = *nišū*, “mankind” (E. Reiner, *Šurpu: A Collection of Sumerian and Akkadian Incantations*, AfO suppl. 11 [Graz, 1958], p. 36, tablet 7, l. 9), and for un-lu-a = *tenēštu*, “people” (BAM 6, 584:col. iv 6; IV R² 18, no. 3:col. i 8; there: KID-lu-[a]).
- 14: The Akkadian interlinear translation diverges from the Sumerian version and is difficult to understand. The restoration of the Akkadian version follows *SBH* 68:rev. 17. Clearly, ù (= u₅) was interpreted as *šaqû*. The two signs A and IGI separated by the sign ù in the Sumerian version were understood as A IGI = ér = *dimmatu* in the translation (kindly pointed out to this writer by W. G. Lambert).

No. 17

Fragment of an Emesal Prayer

Introduction

This small fragment MMA 86.11.476 belongs to an Emesal prayer. There are only a few traces of signs left. On the reverse, in addition to the Akkadian word *mi]t-ha-riš* (l. 4'), we recognize a small remnant of a *glossenkeil*, which was used to indicate variants or to delimit the Akkadian version from the Sumerian in these texts.

17.

MMA 86.11.476

Plate 29

H. 34 mm W. 24 mm Th. 21 mm

Obverse

(beginning of obverse broken)

1'. . .] x x [. . .

2'. . .] x [. . .

Fragment of an Emesal Prayer

Seleucid or Arsacid period (Babylon)

3'. . . Úr]u-zí-ib^{ki}-b[a(?)] . . .

4'. . . n]u(?)-ma-a[l . . .

5'. . .] IGI KU L[U(?)] . . .

6'. . .] x àm-ta-lá x [. . .

7'. . .] àm-t]a-lá [. . .

8'. . .] x [. . .

Reverse

(traces of six lines)

Translation

This text is too fragmentary for translation.

No. 18

Hymn to Marduk

Introduction

The very neatly inscribed fragment MMA 86.11.313 is a piece from the middle of a tablet that may have had several columns. It contains a hymnic text in Sumerian, which includes an Akkadian interlinear translation. This hymn, praising the god Marduk, is written in the main Sumerian dialect and not, as the other bilingual texts treated above, in the Emesal dialect. Therefore, it is less likely that MMA 86.11.313 belonged to the hymnic introduction to a Sumerian šuilla prayer or to a balag composition, since those types of text were written in Emesal.¹ The present text reminds us, in both content and style, of hymns from the late Kassite period or the Isin II period, such as IV R² 12² and K 4874 and its duplicates³ (references courtesy of W. G. Lambert). Lambert suggests that MMA 86.11.313 might be another fragment belonging to the latter text.

In the divine epithets describing the power and glory of Marduk in our text we find clear allusions to the creation epic, *Enūma eliš*. For instance, Marduk's installation of the sun and the moon in ll. 3'-4' of our text reminds us of a similar account from the beginning of the fifth tablet of the creation epic; the creation of mankind by Marduk—mentioned in MMA 86.11.313:5'—is a topic of the sixth tablet of *Enūma eliš*. Also, the concept that Marduk established the abodes of the other gods and assigned the spheres of power to the gods of the pantheon (l. 6') is a central idea in the creation epic *Enūma eliš* (see e.g., *Enūma eliš* V, 137–38).

Surprisingly, the form of the hymnic text is interrupted in l. 8' of the Sumerian version of the present tablet by a petition addressed to Marduk, to assign the insignia of kingship (*gišgidru bala ba-mu-un*). If we take the Sumerian version of this line seriously (the Akkadian translation differs by continuing in the hymnic participal style), we seem to arrive at the central message of this (unfortunately very fragmentary) text. We should seriously consider whether or not this prayer addressed to Marduk requesting him to "give" the royal insignia was used in the course of a ritual that actually took place. If this is the case, it would not be too far-fetched to assume that the present text might have been recited as part of a coronation ritual. It is possible that this Marduk prayer functioned as part of the New Year's festival in Babylon. During this festival the Babylonian king had to lay down his royal insignia (see *RAcc*, p. 144, ll. 415–28). He then had his ears boxed by the high priest (*šešgallu*) and was pulled down by the ears. Next, the ruler of Babylon made a declaration to Marduk that he had not brought any harm to the city of the god, Babylon, and that he had averted all calamities from the city, after which Marduk renewed his kingship (see *RAcc*, p. 145, l. 438) with a promise to destroy the enemies of the king (*RAcc*, p. 145, l. 446; see also the present text ll. 9'-10'). Finally, the king was given back the insignia of his power (see *RAcc*, p. 145, l. 448). Our text may have been recited within this major scene of the New Year's festival in Babylon. This, however, remains only a conjecture.

1. The text treated here has certain similarities with a Sumerian šuilla, addressed to the main god of the city of Uruk during the New Year's festival on the 10th Nisannu in that city (cf. *RAcc*, pp. 70–71, ll. 108–11).
2. Cf. W. G. Lambert, "A New Fragment from a List of Antediluvian Kings and Marduk's Chariot," in M. A. Beek, A. A. Kampman, C. Nijland, and J. Ryckmans, eds., *Symbolae Biblicae et Mesopotamicae Francisco Mario Theodoro de Liagre Böhl Dedicatae* (Leiden, 1973), pp. 271–80.
3. See W. G. Lambert, "Enmeduranki and Related Matters," *JCS* 21 (1967), pp. 126–38, and *CRRA* 19 (1974), pp. 427–40 (edition of the text: pp. 434–38).

18.

MMA 86.11.313

Plate 30

H. 91 mm W. 99 mm Th. 29 mm

Obverse

Hymn to Marduk

Neo-Babylonian period(?)

(beginning of obverse broken)

- 1'. [.....] x x [...]
[.....]-x-ma-nu mu-¹šá-aZ¹-x [...]
- 2'. [.....z]à an ki-ke₄ nam-en-na-¹bi¹ x [...]
[.....](-)x-i-ri šá a-na pa-aṭ šamē(AN)^e u eršetim(KI)^{tim} šur-ba-¹tu¹ [b]e-lu-ut-¹su¹
- 3'. [.....dingir min-na-bi e|n-nun an ki-a giskim-ta igi mu-un-lá-e
[.....] X DINGIR^{meš} ki-lal-la-an ma-aş-şar šamē(AN)^e u eršetim(KI)^{tim} mu-kal-lim şa-ad-du
- 4'. [.....^dNanJna ^dUtu-ke₄ «mu» giš-gal-gal bí-in-tab-ba e-ne-ne
[.....] x qa-²i-ip ^dNa-an-na-ru u ^dŠamši(UTU)^{xi} mu-şat-me-eḥ šá-a-şú-nu nam-za-qu rabû(GAL)^{u¹(?)}
- 5'. [.....^d] AMAR¹.UTU-ke₄ mu mu-bi-gin₇ nam-pa-è-bi (erasure) ag-e-dè
[.....] x ba-nu-ú ni-ši ^dMarduk(AMAR.UTU) šá ki-ma šu-mi-şu-ma šu-pu-ú zi-kir-¹şú¹
- 6'. [...] x ḥa(?)-la-ke₄ imin dingir kur-kur KU(?)-àm dag ús-bi sag-ki gi₄-a dab-bé-¹da¹
[(...) muza²iz(?) bēlūt k]ib-¹ra¹-a-ti ár-ba-²i ana DINGIR^{me} kiş-şat da-ád-me mu-şar-şid şu-bat-su-nu a-hi-iż sak-ki-şú-n[u]
- 7'. [...] x sá-dug₄ bí-in-du₈-du₈ kin-sig na-iži sum-mu ki-şu-peş₅ dù-a-bi
[... muṭah̄hid] sat-tuk-ku šá-kin nin-da-bé-e na-din qut-rin-nu u tak-li-mu ana ka-liş ma-ḥa-z[u]
- 8'. [...] x ^{giš}gu-za] gub-ba nam-lugal-la sa₄-a ^{giš}gidru bala ba-mu-un u₄ sù-sù-d[a]
[... mukīn k]u-us-si-i na-bu-ú šar-ru-tu qa-²i-iş ḥaṭ-tu u pa-la-a ana ūmī(UD)^{meš} ru-qu-t[u]
- 9'. [...] x mi-ni-ʃb-ḥa-lam-ma lú-gi₁₆-gi₁₆ ba-an-sá-sá dab-dab-ba ḥul-e-ne kal-ga ba-an-z[i-zi(-)]
[... muḥalliq şe]-nu u rag-gu ka-şid qar-da-mu ka-mu-ú lem-nu-tu na-¹si¹-iḥ dāš-ṭu-ú-t[u]

- 10'. [.](-)mù gú-dù-a-bi ḡir šilīg šen-šen-na lú nu-un-gi₄-[a]
 [...] x qa-mu-ú za-²i-ri-šú gaš-ru šag-ga-pi-ru šá la im-ma-ḥar qa-bal-[šú]
- 11'. [.] an ki-a mu-pàd-da dugud-da-bi An-na ^d+En-líl-lá ní-bi su₈-su₈-ga-àm kir₄ šu gál-la [x]
 [...] x šá a-na zi-kir šumí(MU)-šú kab-ta ^dA-num u ^d+En-líl pal-ḥi-iš iz-za-az-zu-uš i-l[ab-binūš appa]
- 12'. [...] x gi giš-gi-gin₇ ní te-ge₂₆-da su-ne-ne mu-un-dúb-dúb-[...]
 [...] x ¹ki¹-ma qa-né-e a-pi šah-ṭu-ma i-nar-ru-ṭu zu-mur-šu-[un]
- 13' [...] 'gal-e¹-[n]e lugal dingir dalla šár-ra-ke₄ mí zi-dè-eš dug₄-ge-[...]
 [...] x DINGIR^{meš} šá ina kiš-šat šu-pu-ú ki-niš ik-[kannū]
- 14'. [...] 'a-ra-le-eš(?) mu-un¹-[d]a-an-x [x (x)]
 (rest of obverse broken)

Translation

Obverse

- 1'. [.] the , the one who [.]s [...]
- 2'. [.] whose power is great throughout heaven and earth;
- 3'. [.] who . . . ed . . . tjo(?) the two gods, the guards of heaven and earth, who show (ominous) signs.
- 4'. [.] , who entrusts the Moon (god) and the Sun (god) (and) gave them the big key;
- 5'. [.] the creator of the people], Marduk, whose name in accordance with his (important) name shall be made glorious;
 Akk.: [.] , the creator of the people, Marduk, whose fame is glorious in accordance with his name;
- 6'. [(.)] the one who distributed(?) the rulership over] the four quarters of the world among the gods of all the inhabited regions; the one who established (firmly) their dwelling, who has learned the[ir] divine rules;
- 7'. [(.)] the one who makes abundant [.] . . . (and) the regular (*sattukku*)-offering; the one who provides all the sanctuaries with food allotments (and) incense offerings;
 Akk.: [(.)] the one who makes abundant] the regular (*sattukku*)-offerings; the one who sets out the (*nindabû*)-cereal offerings (and) provides all the sanctuaries with incense offerings and (*taklimu*)-food offerings;
- 8'. [(.)] the one who firmly establishes [the throne], who proclaims kingship, bestows scepter and the *palû*-symbol for all the time;
 Akk.: [(.)] the one who firmly establishes] the throne, who proclaims kingship and bestows scepter and the *palû*-symbol for all the time;
- 9'. [(.)] the one who destroys [the wicked] man and the evildoer, who overwhelms the roguish person, captures the evil persons, (and) expels the dangerous enemies;
- 10'. [.] , the one who consumes (like fire) all his enemies; the powerful, the mighty one, whom no one can withstand in the battle;

- Akk.: [.] , the one who consumes (like fire) his enemies, the powerful, the mighty one,
who[se] attack cannot be faced;
- 11'. [(.) The] of heaven and earth, at the mention of whose mighty name Anu and Enlil stand in awe
(and) ass[ume an attitude of] humility,
- 12'. [.] , in order to make them afraid like reeds of a canebrake, he makes their bodies
tremble.
Akk.: [.] like reeds of a canebrake they are afraid and the[ir] bodies tremble.
- 13'. [.] the great [. . .], the kings, the gods who are glorious in the entire world are tre[ated]
with tender care.
- 14'. [.] to the netherworld(?)[.]

Notes

Obverse

- 2': The beginning of the Akkadian line may be perhaps be restored [*zā?*]iri, “[the ene]my.”
- 3': Only the Akkadian version has been translated. The restoration: dingir min-na-bi is based on TCL 6, 51:rev. 1–2 (= F. Thureau-Dangin, “L’Exaltation d’Ištar,” RA 11 [1914], p. 148, l. 26). As a Sumerian equivalent to *kilallān* we should also take into consideration maš-tab-ba (see CAD K, p. 353). The equivalence lá = *kullumu* is attested (CAD K, p. 519 s.v. *kullumu*), but igi-lá = *kullumu* is only found here; otherwise igi-lá is rendered *naṭālu*, “to look” (see CAD N/2, pp. 121–22 s.v. *naṭālu*), which in the causative stem has the meaning “to let see, show” (ibid., p. 128). The subject of the singular form igi mu-un-lá-e remains unclear.
- 4': The meaning is that Marduk handed over the key to the “gates of heaven” to the Moon and the Sun. This key permitted the gods to “cross” and “leave” heaven (compare TCL 6, 51:rev. 1–2, where the Moon and the Sun are described as “the gods who open the gates of the heaven” [*pētū dalāt ḫAnu*]). That we are dealing with “the key to heaven” here is confirmed by UVB 15 36:12 (see CAD N/1, pp. 256–57 s.v. *namzāqu*). The Sumerian equivalent of *namzāqu* seems to be giš, which otherwise only means “wood” (or perhaps *namzāqu* = giš-gal?). The mu before giš is probably superfluous. mu indeed is the Emesal form for giš in the Sumerian main dialect, but since the text is otherwise written entirely in the Sumerian main dialect, a single Emesal form would be unusual, especially since the main dialect form follows.
- 6': Only the Akkadian line has been translated (for the restoration of the first part of the line see CT 16, 19:62–63). The Sumerian version of the first half of the line deviates considerably from the Akkadian translation, and it is virtually unintelligible to this writer. It is possible that the scribe rendered imin with *kiššatu* (cf. the equivalent example in CAD K, p. 457). The second half of the Sumerian line reads: “the one who seizes (their) dwellings together with their foundations and (their) . . . divine rules.”
- 7': The first sign of the Sumerian line cannot be read as *nidjba*, however tempting. For the translation of bí-ib-dug-dug compare the equivalence *dug* = *tahādu* (see AHW, p. 1378). The Sumerian kin-sig was obviously rendered *taklimu* in this line. The normal Akkadian equivalent for kin-sig is *naptanu*, “meal.”
- 8': For this line see RAcc, p. 108, ll. 1–2.
- 9': The peculiar Sumerian word order (of which there are numerous examples in this text) dab-dab-ba ḥul-e-ne is probably influenced by the Akkadian word order *kamū lemnūtu*. ḥul-e-ne can hardly be considered the object for ba-an-z{i-zi(-)}.
- 13': Perhaps the traces at the beginning of the Akkadian line can be read: LUGAL^{me]}§.

No. 19

Fragments of a Solid Clay Barrel Cylinder with Unidentified Hymn

W. G. Lambert

Introduction

The two fragments MMA 86.11.419 + MMA 86.11.483 and MMA 86.11.538 can be considered parts of the same cylinder with reasonable certainty. The main piece, given first here, is from the middle of the cylinder and belongs to a rare and distinctive type of cuneiform inscription, hitherto known from eight pieces of such cylinders inscribed with hymns of praise to Nabû and three pieces with a hymn to Ninurta, all in the British Museum (see selected bibliography below). The hymns are not atypical, but the cylinders and the way in which they are inscribed are. Very generally, literary texts were inscribed on tablets, but in the Old Babylonian period prisms were occasionally used for this purpose. In the first millennium B.C. cylinders were commonly used for royal Babylonian inscriptions, but these were normally hollow. The solid barrel cylinders dealt with here are all Late Babylonian and when complete had two columns of writing around them. But very unusually the columns were *tête bêche*, and still more unusually rows of cuneiform signs, always the same sign in one row, were used as a kind of frame for the inscription, placed around the edges of the cylinder, between the columns, and to mark the beginning and end of each column. The signs chosen for this purpose add up to the word *mu-ša/šar-ru-ú*, “inscription,” which is hardly a revelation. The pieces edited here are fully typical. The only row of signs, which is partly preserved, offers *-ru*. Too little of the text is preserved to merit translation, and therefore a transliteration is given, and that with reserve, since the condition of the fragments is poor.

Selected Bibliography

Hymns to Nabû:

W. G. Lambert, “Nabû Hymns on Cylinders,” in B. Hruška and G. Komoróczy, eds., *Festschrift Lubor Matouš 2* (Budapest, 1978), pp. 75–111

Hymn to Ninurta:

W. R. Mayer, “Ein Hymnus auf Ninurta als Helfer in der Not,” *OrNS* 61 (1992), pp. 17–57

19.

MMA 86.11.419 + MMA 86.11.483 (+)

MMA 86.11.538

Plate 31

H. 91 mm W. 99 mm Th. 29 mm

(beginning of cylinder broken)

1'. . .]-^rú-*du*(?)¹

2'. . .] x *ina libbi-šú za ti*(?) x

3'. . .] -^r*da*¹ : *na*(?)-*za*-^r*zu*¹ *li-ta-mu-ú KUR*(?)

4'. . .] : *li-iz-ziz* [(.) *ina*] *imittí(15?)-ia*₅ *ina šumēli(150)-i[á]*

Fragments of a Solid Clay Barrel Cylinder with
Unidentified Hymn
Middle 1st millennium

5'. . .] x šu/bur(?)*-di-í-a* : [(..)] x ši x [(x)]

6'. . .] x ur [(..)] x x bi(?)

7'. . .] x bi x x *lem-ni*

8'. . .] KIN/HAR-*gu*

9'. . .] ^d*En-lil u* ^d*rNin(?)¹-DUTUM*

10'. . .] *li-šag(?)-giš*

11'. . .] x *ud(?) x x*

12'. . .] *lu(?) ku(?)*

13'. . .] x x-*ka*

14'. . .] x

15'. . .] x x

(A row of RU signs is written vertically along the ends of the lines.)

MMA 86.11.538

Column A

1'. . .] x x x

2'. . .] x ad šeš

Column B

1'. (traces)

2'. . .] x-tú

3'. . .] x é/*kit-tú*

4'. . .] ^{'e}*-sag-gíl*

5'. . . *i/ta]-nam-da*

6'. . .] x a² x tin

(A row of RU signs is written vertically between the columns.)

Translation

This text is too fragmentary for translation.

Nos. 20–23

Rituals

W. G. Lambert

Introduction

The status of temples in Babylonia was ambiguous. In theological perspective the gods were far more important than men, even than rulers. In practice aspects of the organization of temples supported the view that they were nationally independent institutions. They were usually wealthy institutions owning land and workshops and controlling their own staff, like Medieval monasteries. However, the rulers were intimately involved in that, first, they frequently contributed to temple wealth and assumed responsibility for repairs and rebuilding of the fabric, and, second, they normally participated in certain important temple rituals, especially in the major temples of their capital city. The senior clergy of such temples were important figures of state, and this situation could easily lead to friction between the secular head of state—the ruler—and the spiritual head of state—the high priest. Down the centuries we hear remarkably little of such problems, and no doubt everything depended on the characters of the two persons most concerned. A dominant ruler would effectively control clerical appointments and so control the temples, while a weak ruler would often be manipulated by the clerics.

In the ancient world no one disputed the need for temples. Their divine occupants were held to control the universe, and so to be able to make the country powerful and prosperous or to make it suffer disaster from one of several causes. To ensure the well-being of the country ritual performances in the temple took place regularly: daily rituals, monthly rituals, and rituals for seasonal festivals, as well as rituals in response to casual happenings of dangerous import. The purpose was to keep the gods so venerated in good humor: fine meals were provided within these rituals twice a day; cultic songs were sung or chanted to flatter the gods and to obtain what the humans wanted. Since the purpose was to gratify and to manipulate the gods, only the priests and occasionally members of the ruling class participated. These cults were not an exercise in human devotion and were not meant to inculcate piety in the masses, so the human population in general was not allowed in temples, although they would share in the spirit of major seasonal festivals.

Many texts survive from the first millennium B.C. that give the order of service in detail for particular rituals in particular temples. Some give only the sequence of the various acts, with only the titles of the pieces to be sung or recited. Others give only the texts of these sung or recited pieces, while still others give both. In earlier periods, before it was usual to write down these matters, the priests presumably learned the acts and the recitations by experience and by memory, and even when written texts were available, the participants in the rites no doubt acted their parts without any tablet held in the hand to prompt them.

No. 20

Ritual

Introduction

The main piece, MMA 86.11.376A, is the upper left-hand portion of a tablet with one column on each side. The small fragment MMA 86.11.376B comes from the same tablet and is from the middle of the column. Both pieces preserve part of the upper edge. There is a gap between fragments A and B, which incidentally shows that the lines of script were long ones. The colophon confirms that this is a one-column tablet, but it gives no hint about the content. In general terms the content is easily found by study of the text. It is a ritual text describing rites involving the gods Nabû; Nanay, his wife; the “Daughters of Ezida”; Ukkumu and Sukkumu, two of Marduk’s dogs; Nuska; and the two-faced Sumiya. These deities and the general style of the piece point unambiguously to the official cult in first-millennium Babylon. While Nabû’s chief shrine was Ezida in Borsippa, he also had a shrine of the same name in Babylon. While this would allow both Borsippa and Babylon to be considered as possible locations, Marduk’s two dogs are so far known from texts only in Babylon.

Although the generalities are clear, the particular occasion in the cultic year and the precise location of the acts described are not known. This is not one of the standard four-column tablets with a big section of ritual for, e.g., certain days of a given month, but some kind of an extract. The first words may begin a sentence (the lines are not sufficiently complete to be sure), but this is not the beginning of a section, which would state the month and day of the month. The colophon, however, hardly allows this to be taken as an exercise tablet from a scribal school. The importance of the piece lies in the possibility that more pieces of this ritual will eventually turn up and they will jointly provide a clear consecutive text. The trees in obv. 2–3 are something not known in already published rituals of this type, and they hint at revelations to which this tablet may eventually lead.

20.

MMA 86.11.376A (+) MMA 86.11.376B

Ritual

Plates 32, 33

Later 1st millennium (Babylon?)

H. 103 mm W. 91 mm Th. 35 mm (MMA 86.11.376A)

H. 54 mm W. 41 mm Th. 32 mm (MMA 86.11.376B)

Obverse

1. *ina bi-r[i]t ^dNabû(NÀ) u ^dN[a-n]a-a MIN ^dSu-mi-iá pa-ni-pa-n[i . . .] x ma-da-a-a ina pān-at ab x [. . .*
 2. *gáp-nu-ú in-bi [šá ⁿ] ^{a4}sāmtu(GUG) ti-ik-ka-šú-nu gáp-n[u-ú in-b]u šá ^{na4}sāmtu(GUG) ina muh-b[i . . .*
 3. *gáp-nu-ú sak ku [(x) i]na ti-ik-ki-NU-ŠÚ na-du-ú la [. . .] na-ba-su la [. . .*
-
4. *^dUk-ku-mu ^dS[uk-k]u-mu ina túp-[p]a-a-ti šá ^dx x (x) [. . .] ^{1d1}Uk-ku-mu a-na imitti(15) ^dx [. . .*
 5. *^dUk-ku-mu u ^d[Su]k-ku-mu gáp-nu-ú UR x x x [. . .] x šá ma-qa-qa BAR x [. . .*
 6. *ina ti-ik-ku šá/lal ^dx [(x)] x x [x] x kišādu(gú) šá ^{na4}an.ta x lu(?) x [. . . š]á ^dSuk-ku-mu KAB x [. . .*

7. *a-na šumēl(GÙB) giškus[s]i*^d *Na-na-a u*^d *Mārāte(DUMU×MUNUS)*^{meš} *É-z-i-^tda¹* x [. . .] ^d *Na-na-a 3*
gar-ra-n[i . . .]

8. *sib-tum* x x x (x) šá ^d*Nabû(NÀ)* *lab-šu-*² *imšukku(IM.ŠÚ)* šá *SAR(?)* x x [. . .] x-re-e-ti šá [. . .]

9. *bi-rit a-gur-ri* x x (x) šu *pa-nu* šá *ħurāši uk-ku* [1]5 u x [. . .] x x x x [. . .]

10. šá *te-ret*^{meš} šá x x *ina muħ-hi-šú*^d *Uk-ku-mu u*^d *Nabû(NÀ)* [. . .]

11. *DIŠ la-al-li(-)* x x (x) *DIŠ bur(?) iš-pa-ri DIŠ zi-ib-[. . .]*

12. *Mārāte(DUMU×MUNUS)*^{meš} *É-z-i-d[a]* x^{meš}-ši-na *ka-rib*^{meš} *šubāt ta-kil-[tú . . .]*

13. *it-ti ku-bur-[ru]-¹ú¹* šá *pa-ni é* x x (x) ^d*Nuska* [. . .]

14. ^dx.x x x [x] x x x x [x] x x x [. . .]

15. 40 x [x] x x [x x] x x [x x] x it x x x [. . .]

16. x *gan-gan-na-a-[tú šá(?)]* ¹A^{1meš} šu¹¹ ¹7(?)¹-ši-na ^{1^{et}} šá ki [. . .]

17. x šá *šap-pe-e* ^{1^{et}} KAL-te x x (x) šá 2 ta x [. . .]

18. x-na-tú ù 2^{ta} *pe-ħa-*² *ina lib-bi pe-ħe* x [. . .]

19. [*ina*] *lib-bi illaku(DU)*^{ku-2} *kab-li-ši-na* *DIŠ te-li-x* [. . .]

20. [x] x-im-mu u x x š[i]-bir-ri *għil-ta-ni* ŠI [. . .]

21. [x (x)] *bāba-a-nu-ú a-n[a]* *imitti([1]5)* ši-bir-ri u na[m-ħa-ri . . .]

22. (traces)
(rest of obverse broken)

Reverse

- 1'. x qu a [x x x x x x]meš šá [. . .]

2'. [š]á su du šu x [x x x x] x šum(?) [. . .]

3'. šumēla(GÙB) ^dLah-mu [x x x i/a]-na šumēl(GÙB) ^{d1}Gu-la¹ x [. . .]

4'. pu-uk-ki-šú-nu x [x x ^{uzu}]hu-ru-up-pu šá ^dA-[. . .]

5'. š[á x x] x-te BU [x x] x-i-ri áš-ri is-hi/am x x [. . .]

6'. šumēl(GÙB) x x x [x x x] it-ti ki(?)ra-tum KAB [. . .]

7'. ina muḥ-ḥi pa(?) x [x x (x)] x x x (x) KA pa-ni [. . .]

8'. ina muḥ-ḥi pa(?) x [x x (?)] x x x (x) šu(?) x x x [. . .]

9'. an-ha-tum x x [x p]aspasu([U]Z.TUR)^{mušen} muš-šu-lu [. . .]

10'. i-na šumēl(GÙB) x x [x x] x ina muḥ-ḥi al-lu-ut-tum x [. . .]

11'. gi-ṭu ^{Id}Bē[l-k]u-ṣur-šú A šá ^{Id}Bēl-[. . .] x x [. . .]

12'. pa-liḥ ^d[Mard]uk [u] ^dZar-pa-ni-tum li-[iš]-sur l[i-šá-qir]

13'. a-na là mār T[IN.TIR^k]i u a-na là mār Bar-sip^[kī] la ú-k[al-lam]

Translation

Obverse

1. Between Nabû and Nanay *ditto* Sumiya [...] the seat . . . before . . . [.]
 2. Fruit trees whose “necks” are cornelian, fruit trees on [whose . . .] is cornelian

3. Trees on whose “necks” are placed . . [.] . [. . .] colored wool . [. . .]
-
4. Ukkumu, Sukkumu on tablets of . . . [. . .] Ukkumu to the right . . [. . .]
5. Ukkumu and Sukkumu trees . . . [. . .] stiffness . . [. . .]
6. on the neck . . . [. . .] . [. . .] a necklace of . . -stone . . . [. . .]. Sukkumu . . [. . .]
-
7. To the left of the seat, Nanay and the Daughters of Ezida . [. . .] Nanay three . . . [. . .]
8. The . . . garment with which Nabû is clothed, a clay box . . . [. . .] . . . [. . .]
9. Between the paving slabs . . . face of gold . . right and . [. . .] . . . [. . .]
10. . . the decrees/omens . . . upon him/it Ukkumu and Nabû . . .
11. one . . . one weaver’s . . , one . . [. . .]
12. the Daughters of Ezida, their . . the adoring gods, a garment of purple . . .
13. together with the buttress(?) in the front of the temple . . Nuska . . .
- 14–15. (too damaged for translation)
16. seven(?) pot stands for water for the hands, one . . [. . .]
17. . . bowls, one . . . two . . [. . .]
18. . . two . . . [. . .]
19. serve the purpose, their (chair) legs . [. . .]
20. [. . .] . . . scepter, rungs . . [. . .]
21. the outer [. . .] to the right of the scepter and sword [. . .]

Reverse

- 1–2'. (too damaged for translation)
- 3'. On the left (of?) the Lahmu [. . .] . the left (of?) Gula . [. . .]
- 4'. Their hoops . [. . .] the cut of meat of the god . [. . .]
- 5'. . [. . .] . . [. . .] [. . .]
- 6'. left . . [. . .] [. . .]
- 7'. upon, . . [. . .] . . . face [. . .]
- 8'. upon . . [. . .] [. . .]
- 9'. the . . . -bird . . [. .] duck likened [. . .]
- 10'. On the left . . [. . .] . upon the crab . [. . .]
-
- 11'. One-column tablet of Bēl-kuşuršu, son of Bēl-[. . .] . . [. . .]
- 12'. The worshipper of Marduk and Zarpānitum must guard and [treasure]
- 13'. and must not show it to anyone not a citizen of Babylon or Borsippa.

Notes

Obverse

- 1: Although traditionally Tašmētu is Nabû’s wife, in first-millennium texts Nanay is often named with him as though his spouse. She was traditionally associated with Uruk and either equated with or distinguished from Ištar. One factor in her association with Nanay may be that when Marduk took over the position of Enlil in

the pantheon, Nabû took on some of the former rank of Anu, and Nanay as an Urukian goddess provided Nabû with a better claim to Anuship. Sumiya is a variant writing of the name of Ea's two-faced vizier, Isimu in Sumerian, Usmû in Akkadian (see W. G. Lambert, "Isimu," RLA 5 (1976–80), p. 179).

- 2–3: Presumably these lines describe actual model trees preserved in the temple. Note that in the Babylonian Gilgameš Epic IX 172–190 (see A. R. George, *The Babylonian Gilgamesh Epic: Introduction, Critical Edition, and Cuneiform Texts* [Oxford, 2003], pp. 672–75), Gilgameš on his travels comes to a land where the trees bore lapis foliage and carnelian fruit. Also, in the Love Lyrics, Ištar of Babylon is described as "a carnelian palm tree" (*gišgišimmar našāndi*); see W. G. Lambert, "The Problem of the Love Lyrics," in H. Goedicke and J. J. M. Roberts, eds., *Unity and Diversity: Essays in the History, Literature, and Religion of the Ancient Near East* (Baltimore, 1975), p. 122, l. 20.
- 4–6: An = *Anum* II 257–60 gives the names of Marduk's four dogs (4 *ur.gi₇ ḫamar.utu.ke₄*) as: ^dUk-ku-mu, ^dSukku-lu, ^dIk-šu-du, and ^dIl-te-bu (CT 24, 16:19–23, etc.), "Snatcher," "Seizer," "He got it," and "He howled," each of which has a clear etymology: *ekēmu*, *sakālu*, *kašādu*, and *labū*. The Middle Assyrian variant to the second ^d*Su-ku-ku*, "Deaf" (CT 24, 28:74) is clearly an error. The variant ^d*Suk-ku-mu* as used here is also clearly an error, since there is no root *skm* in Akkadian, and the explanation is clear from a Late Babylonian copy of a god list that offers the following forms of the names: ^d*Uk-ku-mu*, ^d*Suk-uk-ku-mu*, ^d*Ik-šu-du*, ^d*Il-te-bi* (O. Neugebauer, *The Exact Sciences in Antiquity* 2nd ed. [Providence, 1957], pl. 14 Sp. II 500). After writing out the first sign of Sukkulu, the scribe erroneously copied out Ukkumu. Thus Sukkumu is a corrupt mixture of Ukkumu and Sukkulu.
- 4: If *tuppu*, "tablet" is the word, the use of the sign *dúb* is unexpected, but no other word suggests itself.
- 6: ^{na}_aan.ta occurs in an Old Babylonian list of stone names (see MSL 10, p. 53 195) for which the Ras Shamra version of Urra = *hubullu* offers ^{na}_aú.ú.an.na = *e-lu* (MSL 10, p. 49 329).
- 9: A restoration [1]5 u 1[50], "right and left" is possible.
- 13: *kuburrû* is an architectural term; see CAD K, p. 489 s.v. *kuburrû*.

Reverse

- 3: On the *laḥmu* see F. A. M. Wiggermann, "Exit *Talim!* Studies in Babylonian Demonology, I," JEOL 27 (1981–82), pp. 90–105, and W. G. Lambert, "The Pair Laḥmu–Laḥamu in Cosmology," OrNS 54 (1985), pp. 189–202.
- 9: In view of the bird name following, one may at least wonder whether the first word *an-ha-tum* is not also a bird name. If so, then the bird hitherto read *anpatu*—since it is always written as *pa*, as far as is known—has been misread and must be read *an-hat-tum*. The only evidence for *anpatu* is a Hebrew and Syriac bird name, but this is not certainly cognate. See CAD A/2, p. 143 s.v. *anpatu* for passages and the alleged cognate.

No. 21

Ritual Fragment

Introduction

The flake MMA 86.11.359, written in largish signs, could be either a fragment from a ritual or a fragment from a text explaining a ritual. Since the former genre is more commonly met than the latter, it is most likely from a ritual. The allusion to a temple gate (l. 2), to “daises” (l. 7), and to the apparent mention of Esagil (l. 10), along with Sumerian recitative in l. 6, suggest a ritual of the kind usually called “public,” i.e., taking place in the state-supported temples. What remains gives no clear indication of the precise events being described, and so little remains from each line that interpretation of the signs is often uncertain, and more alternatives exist than those to which attention is called in the Notes below.

It is impossible to estimate the size and format of the complete tablet from this fragment. The sign-forms suggest a date of writing in the later Persian period or under the Seleucids.

21.

MMA 86.11.359

Plate 34

H. 52 mm W. 65 mm Th. 13 mm

Ritual Fragment

Later 1st millennium

Obverse/Reverse(?)

- 1'. . .] x x (x) [. . .
- 2'. . .] *bābi rabī' bāb* É AN x [. . .
- 3'. . .] x *tu-sir pi-rik-šú ina SU* x [. . .
- 4'. . .] x *i-dir-tum u bi-ki-tum ina* x [. . .
- 5'. . .] ¹*i*²-*ger-ru*³ šá ⁴*Ninurta(MAŠ)* eli-šá ub-x [. . .
- 6'. . . G]AN ⁵*i*⁶NE UD.16.KAM me.en.nam [. . .
- 7'. . .] x ku i dug *ina muh-hi parakki*⁷*meš* [. . .
- 8'. . .] x-i-ib-ma šá-a-a-al-tum šá [. . .
- 9'. . .] x-ru-ru šal-mat-su ana ur x [. . .
- 10'. . .] É(?)*sag(?)-il ana* ¹*muhhi*¹ u[b-ba-lu(?) . . .

Translation

- 2'. . .] the great gate, the gate of . . . [. . .
- 3'. . .] . your rub, its blockage with. . . [. . .
- 4'. . .] . grief and weeping . . [. . .
- 5'. . .] they are hostile, that of Ninurta x x [. . .] upon it [. . .
- 6'. . .] . on the 16th of month Ab “I am / You are . . .

- 7'. . .] . . . upon the daises [. . .
 8'. . .] . . . the question, which [. . .
 9'. . .] . . . its corpse to . . . [. . .
 10'. . .] Esagil(?) they [bring(?) in addition [. . .

Notes

- 2': One may read *bit^dx*[. . . alternately one may read *é-an-n[a* . . .
 6': The signs *me.en.nam* are apparently Sumerian recitative.
 8': CAD Š/1, p. 269 s.v. *šāltu* gives only one example of *šāltu*, O.B., written *ša-al-ta-am*.
 9': One may also read *amat-su*, "his slave-girl."

No. 22

Letter about Cultic Matters

Introduction

Although not so much is lacking from this small tablet (MMA 86.11.372A) with a twenty-four line text and short colophon, written on May 22, 157 B.C., the most vital matters are not present due to damage. It would seem to be a letter from a person in authority in Babylon to a plurality of persons involved in certain cultic operations away from the city. What we have is a scribal copy, perhaps from centuries after the events. The last line may be a rubric, although it is not marked off from the preceding document with a ruling. The writer could be a king of Babylon or a high priestly official; perhaps a king is more likely. From l. 6 it appears that the flood is rising and from l. 7 that someone has made his way to the formal barge of Marduk. Then the recipients are instructed to come with certain others to the writer without delay, and by l. 16 certain beings (probably gods) are expected to enter Esagil, Marduk's temple in Babylon. Until more of the text is recovered, there would be no point in speculating about the writer and the events referred to.

22.

MMA 86.11.372A
 Plates 35, 36
 H. 89 mm W. 112 mm Th. 35 mm

Letter about Cultic Matters
 S.E. 155 = 157 B.C. (Babylon)

Obverse

(beginning of obverse broken)

- 1'. . .] x x (x) *šá ina šá-ma-[mi* . . .
 2'. . .-a]*m-ma e-x* [. . .

- 3'. . . *be-l]u-ú-ti-šú rabītu^{lū}* x [. . .
 4'. . .] x-ú *ana ka-a-šú-nu áš-pur-ra* x x x [. . .
 5'. . .] x ^d*Šamaš u* ^d[x (. .)]
 6'. . .] ^d*Ea*(IDIM) *ú-paṭ-tir nagbī*(IDIM)^{meš}-[šú]
 7'. . .] x *a-lak-šú ú-ṭib ana* ^{giš}*rukūb*(MÁ.U₅) *be-lu ilāni^{meš} rabūti^{meš}*
 8'. . .] x-a *u₄-mu la te-ga-a mu-ši la ta-ni-il-la-*²
 9'. . .] x *ár-ḥiš ha-an-tiš kul-dan-[ni]m*
 10'. . .] *šu-ṣa-nim-ma it¹-ti-ku-nu¹ lil-li-k[u-nim(?)]*
 11'. . .] x x
 12'. . .] x
 13'. . .] (x) x x
 14'. . .] x [(x)] x *li-ir-x*
 15'. . .] x *bēlu-ti-šú rabītu^{lū}*
 16'. . .] *Bābili(¹E¹)^{ki} li-ru-bu ana É-sag-gil*

Reverse

- 17'. . .] *šubat(KI.TUŠ)-su-un*
 18'. . .] *šá iṣ-ṣa-nun-du*
 19'. . .] *kakkab šá-ma-mi*
 20'. . .]-¹*te-ner-ru-ub ana lib¹-bi a-ḥa-meš*
 21'. . .] x-ṣi-ru-ma i-zi-bu ¹*ki-iṣ-ṣi¹-šu-un*
 22'. . . ul i(s)-ṣ]i-nu qut-ri-[in-na]
 23'. (traces)
 24'. . .] x^{meš} x x x *iṣ-pur-r[u(?)]*
-
- 25'. . .] x ^{im}DUB ^{Id}ŠÚ-TIN-su-E A-šú šá ^{Id}*Bēl-KAM A* ^{II}*Šumu¹-lib-ṣi*
 26'. [šu . . .] *māri-šú E^{ki} iti*GUD UD.14.KAM MU 1.ME 55.KAM

Translation

Obverse

- 1'. . .] . . . which/who in heaven | . . .
 2'. . .] . . . [. . .
 3'. . .] of his great lordship . [. . .
 4'. . .] . . . I wrote to you (pl.) . . . [. . .
 5'. . .] . Šamaš and . [. . .]
 6'. . .] Ea let loose [his] springs.
 7'. . .] I / he smoothed his way to the barge of the lord of the great gods.
 8'. . .] . . . do not be lazy by day; do not lie down by night;
 9'. . .] . quickly and without delay reach me.
 10'. . .] send them out so that they come with you (pl.).

- 11–14'. (too damaged for translation)
 15'. . .] of his great lordship
 16'. . .] Babylon, so that they may enter Esagil.

Reverse

- 17'. . .] their abode
 18'. . .] who constantly make their rounds
 19'. . .] the stars of heaven
 20'. . .] constantly enters, one another
 21'. . .] have . . .ed and left their sanctuaries
 22'. . . do not] sniff incense
 23'. (too damaged for translation)
 24'. . .] . . . wrote.
 25'. . .] tablet of Marduk-balāssu-iqbi, son of Bēl-ēreš, descendant of Šumu-libši.
 26'. [Hand of], his son. Babylon, month Ayyaru, 14th day, year 155.

Notes

Obverse

- 8'–9': Hammurabi similarly ordered one of his officials: *mu-ši ù ur-ri a-la-kam ep-ša-am-ma ina li-ib-bu 2 u₄-mi a-na Bābilim(KÁ.DINGIR.RA)^{ki} sí-in-qá-am* (AbB 4, 84), “travel by day and night and reach Babylon within two days.” However, this is not enough evidence to suggest that the original letter copied on the tablet was one of Hammurabi’s.
- 24'–26': Comparison with text No. 44 (MMA 86.11.370A):31–33 suggests that l. 24' is really the line of rubric, although not separated from the letter by a ruling. Despite the variation in the colophons, DUMU.A.NI/ *māri-šú*, they are very similar.

No. 23

Theological Text Fragment

MMA 86.11.414
 Plate 37
 H. 76 mm W. 58 mm Th. 29 mm

Obverse/Reverse(?)

1'–9'. (too fragmentary for transliteration)

Theological Text Fragment
 Neo-Babylonian period

10'. . .] x géme ^dGašan-iá 12^{ta} nin^{meš}-šú dumu×munus^{mleš} . . .
11'. . .]-ti ^dNin-líl 12^{ta} nin^{meš}-šú x (x) [. . .

Translation

10'. . .] . the slave-girl of Bēltīya, his/her/its 12 ladies, daughters [. . .
11'. . .] . Ninlil, his/her/its 12 ladies . . [. . .

Remarks

This fragment has mostly pitiful remains of twelve lines. Only two merit attention, namely ll. 10'–11'. The text reads like a Neo-Babylonian theological text expounding details of a pantheon of gods.

Petitions

No. 24

Prayer for a King

W. G. Lambert

Introduction

This small tablet (MMA 86.11.399) is inscribed continuously over obverse, lower edge, reverse, and under edge with ten lines of Late Babylonian cuneiform. Only the first four lines are sufficiently preserved to provide a connected sense.

24.

MMA 86.11.399

Plate 37

H. 26 mm W. 34 mm Th. 15 mm

Obverse

1. *šu-ut-lim-a-šu-ma* Grant him
2. *niši^{meš} sal-mat qaqqadi* the black-headed peoples
3. *li-be-el* to rule

Lower Edge

4. *liš-pur* and direct.

Reverse

5. *[(x)] x x [. . .]* (ll. 5–8 too fragmentary for translation)
6. *mut x [x (x)]*
7. *[ā]š(?)-šú i-na (-) x x [x (x)]*
8. *x x x x [x (x)]*
9. *[l]i-iš-šu-¹ú¹* let them carry

Under Edge

10. *ni-i-ri* my yoke.

Remarks

This text contains a prayer addressed to a single male being, presumably a god, on behalf of a man who was expected to become (or had become) a ruler. There is no hint about *Sitz im Leben*, and one can only speculate. It could be a text recited during a coronation ceremony by the officiating priest. It might have been copied out on the small tablet for practical purposes: to be carried by the priest on his person to refresh his memory should he forget the wording. Or it could have been a scribal exercise. Without more information or other similar documents to compare to this text, no more can be determined.

PART TWO

NOS. 25-41

DOCUMENTS OF THE INCANTATION PRIEST,
DIVINER, PHYSICIAN, AND MAGICIAN

Preface

W. G. Lambert

In the Hellenistic world “Chaldeans” was a term used for magicians and related practitioners. It arose from the magic for which the Babylonians were famous, although as a term “Chaldeans” originated not from the Babylonians but from Arameans who infiltrated into Babylonia early in the first millennium b.c. The Babylonians inherited their penchant for these “sciences” from their Sumerian predecessors, although they developed them much further. The processes derive from their view of the universe. The Sumerians had noted the various natural forces at work around them, and they concluded that each one was, or was based on, a separate superhuman power. The sun and moon were obvious examples of forces moving on their own power and impinging on the human race: the former by providing the heat to ripen crops; the latter supplying the lunar calendar and the seasons. In addition gods with no visible presence were assumed to be at work. A deity would work and make the apparently dead grain sprout, grow, and multiply. Another deity was presumed to be at work in domestic animals, making them mate and reproduce. By their reasoning the Sumerians conceived of a whole universe filled with distinct divine powers—gods—at work, to whom they attributed human personality. Religion consisted of relating oneself to these powers by cultic performance so as to placate them and keep them working in one’s favor. Some, however, were self-evidently hostile, the god of plague for example. One could not simply flatter such a god as one did the goddess of grain, since his operations were necessarily hostile. A different technique was needed to avert his attention.

This kind of problem lies behind some of the texts in this section. The Babylonians developed their worldview so that a clear divide existed between the generally beneficent gods of the official pantheon and the malevolent spooks and demons that brought disease and other disasters. Magic was brought into play to keep the latter at bay. It involved cultic acts and the recitation of spells, also called incantations. The *Udug-hul* texts given here (text Nos. 25–29) are a good example of this type of text; they are based in part on Sumerian materials but with added Babylonian translations. The effective use of these techniques required appropriate experts; ordinary people would not have had the expertise to operate the system.

With such a multiplicity of gods with different interests and aims, it might seem that no stability could have existed in the Babylonian world. One solution to this problem was the concept of “destinies,” a poor term but one commonly used. The idea behind it was that there existed rules of nature that operate throughout the universe and to which even the gods must conform, a kind of impersonal cosmic power ever-present and all-powerful. Omens were one scribal production that depended on this concept. In many societies eclipses have been considered intimations of disaster, but the Babylonians developed a whole “science” from astronomical and meteorological phenomena, as explained below in the presentation of texts from the series *Enūma Anu Enlil* (text Nos. 36, 37). These omens had the limitation that one had to await the phenomenon to appear in the sky before one could use it to predict something. Other omens, derived from studying the internal organs of sheep, had the advantage that they could be taken at will, and then they predicted something about the person for whom the specialist was working in cutting open the animal and studying the entrails. Text Nos. 34–35 are of this kind. The idea was pushed to such lengths that in Babylonia even a lizard on a wall was ominous to the person who saw it, and the series *Šumma ālu*, here text No. 39, was devoted to this type of omen. Abnormal birth was studied in the same way, and peculiarities of newborn creatures also provided intimation about the future, as in the series *Šumma izbu* (text Nos. 40–41).

Documents of the Incantation Priest: *Utukku lemnūtu*

Markham J. Geller

Introduction

The examples of *Utukku lemnūtu* incantations in The Metropolitan Museum of Art add significantly to the text of one of the lengthiest and most important incantation compilations to survive from pre-Classical antiquity. Sumerian *Utukku lemnūtu* incantations are attested from the mid-third millennium B.C. and survived in bilingual Sumerian and Akkadian copies well into the Seleucid period. A Sumerian edition of *Utukku lemnūtu* incantations existed by the late Old Babylonian period, and a bilingual edition is known from Middle Assyrian tablets from the time of Tiglath-pileser I, ca. 1100 B.C. By the seventh century B.C. a full bilingual edition was known from Ashurbanipal's library at Kuyunjik (partially now in the British Museum), and from other sites in ancient Iraq, such as Ashur, Babylon, Uruk, and Sippar (see Selected Bibliography below).

The incantations deal with themes of attack by demons and ghosts and of divine intervention—particularly by the gods Ea and Marduk—in both protecting against demons and healing the sick man. The series also includes detailed descriptions of demons, and one tablet (text No. 29) includes a myth about a lunar eclipse. The series provides important information regarding Mesopotamian ideas about the netherworld, human and divine relationships, and the role of demons in everyday life. The incantations were employed together with other Sumerian and Akkadian incantations to counter the ever-present threat of demonic malevolence, witchcraft, curses, and illness. Nevertheless, there are general differences among the major types of incantation from ancient Mesopotamia. In one important incantation series known as *Šurpu*, for instance, all misfortune was ultimately ascribed to the victim's own transgressions and sins, either intentional or unintentional, which made him liable to divine punishment. In another Akkadian compilation, *Maqlû*, the evil to be countered emanates from witchcraft and related agents, such as the evil eye or black magic. In *Utukku lemnūtu*, however, neither of these themes dominates. The victim is perceived as a distraught man and helpless victim, whom the gods notice and seek to help, and no moral justification is ascribed to the attack of demons. Although the evil eye, evil tongue, and similar agents appear in *Utukku lemnūtu*, the elements of black magic comprise only part of a long list of demonic manifestations. The scope of *Utukku lemnūtu* appears to be broader and more general than that of other Akkadian incantation series that became popular in the first millennium, perhaps reflecting the earlier, Sumerian origins of the series, composed before incantation genres became specialized.

The specific incantations edited below (text Nos. 25–29) are all from Tablets 3, 12, and 16 of the late series *Utukku lemnūtu*, and all have distinct characteristics. Tablet 3 (see text No. 25) focuses on the role of the incantation priest himself, in his capacity as diagnostician of the patient's illness, which is the same function that the *āšipu* (incantation priest) performs in the diagnostic omen series known as *Enūma ana bīt marṣi āšipu illaku*. In this first millennium Akkadian text the incantation priest goes to the patient's house to make note of his symptoms and determine whether the patient will live or die. The purpose of *Utukku lemnūtu*, Tablet 3, is to protect the incantation priest himself from demonic attack, which posed a serious threat to the *āšipu* as well as to the patient.

Tablet 12 (text Nos. 26–28) deals with demonic disruption of nature and agriculture, described as a desert storm. The central theme of the incantation is that the incantation priest, like Marduk himself, is exhorted to learn the ways of the demons. The ritual described in the tablet is a scapegoat ritual, and the tablet has close parallels with other Mesopotamian incantation series (known as *Bit rimki* and *Bit mēseri*), which deal with ritual purification. The Metropolitan Museum possesses three exemplars of this tablet, all late copies, and two of the manuscripts may come from the same hand (MMA 86.11.366+ [text No. 26] and MMA 86.11.379B+ [text No. 28]). The third manuscript (MMA 86.11.367+ [text No. 27]) is in a rather poor hand, and the general quality of all the sources may suggest that these tablets emanated from the same scribal school rather than from a library.

Tablet 16 (text No. 29) is unusual and may have been appended to the series at a late stage in the development of the compilation. The main theme revolves around the king in relation to an eclipse of the moon, and the incantation is intended to ward off the demonic evil that accompanies an eclipse. The Substitute King Ritual, in which a substitute king is chosen to sit on the throne after an eclipse portends evil to the royal house, is well known.¹ The *Utukku lemñūtu* incantation does not intend, however, to counter any sinister omen from an eclipse but rather deals with the fact that pernicious demons have caused the attack and these same demons could harm the royal household and must be kept at bay through the proper incantations and purification rituals.

The manuscripts of the *Utukku lemñūtu* series from The Metropolitan Museum of Art are Late Babylonian tablets probably from Babylon itself, dating most likely from the Hellenistic period. The tablets are, for the most part, good examples of late compilations, in which care was taken to preserve the standard text of *Utukku lemñūtu* by copying these incantations verbatim, since exact rendition of the text was required for the magic to be effective.

The translation below is based on the Akkadian rather than Sumerian text, since it is not possible to determine how well late scribes understood the Sumerian texts that they faithfully copied. Individual lines of text have been restored on the basis of duplicates found predominantly at the British Museum and the Vorderasiatisches Museum, and many of them are still unpublished or unavailable. The works of R. Campbell Thompson (cited in the Selected Bibliography below) remain useful for cuneiformists to consult, but many of the translations in his *The Devils and Evil Spirits of Babylonia* (London, 1903) are now out of date, despite being the only translations available.

1. See W. G. Lambert, "A Part of the Ritual for the Substitute King," *AfO* 18 (1957–58), pp. 109–12.

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25.

MMA 86.11.379A + MMA 86.11.379C
+ MMA 86.11.379D + MMA 86.11.379E
+ MMA 86.11.468 (+) MMA 86.11.379F

Urukku lemñūtu, Tablet 3

Plates 38, 39 Later 1st millennium (Babylon)
H. 88 mm W. 179 mm Th. 38 mm (MMA 86.11.379A,C,D,E + MMA 86.11.468)
H. 2.1 mm W. 3.0 mm Th. 1.6 mm (MMA 86.11.379E)

Obverse

Column i

- 1–23. (not preserved on MMA tablet)
- (MMA text begins on l. 24)
24. [ùr-mu nam-bal-bal-e-dè]
[ana ú-ri-i]á 'a-a ib-bal¹-k[i-tu-ni]
25. [é-ki-tuš-a-mu] 'nam¹-b[a-ku₄-ku₄-dè]
[ana É šub-ti-i]á a-'a¹ [i-ru-bu-ni]
26. [zi an-na h̄é-p]à zi ki-'a¹ [h̄é-pà]
[niš AN^e lu-ú ta-ma-a-ta niš KI^{tim} lu-ú ta-ma-a-ta]
27. [ka-inim-ma udug h̄ul-a-meš]
(rest of column broken)

Reverse

Column iv

103. [lú-tu-ra-šè gen-na-mu-dè]
[ana ma]r-š[a ina a-la-ki-ia]
104. [ḡišig é-a-ke₄] šu-ús-sa-mu-dè
[da-l]a-at <É> ina š[e-e-ri-ia]
105. [ká(?)-na(?) gù] b[a-an-dé-en-na]
[ina ba-bi-šú (?) ina š]á-se-e-a
106. [kun₄ é-a-k]e₄ bal-bal-e-d[é]
[as-kup-pa]t É ina nu-bal-ki-[ti-ia]
107. [é-a-š]è k[u₄-ku₄-da-mu-dè]
[ana É i-n]a e-re-bi-ia
108. ^{r^d1}[Utu igi-mu-š]è ^dNanna a-[ga-mu-šè]
^dUTU ina p[a-ni-ia] ^{r^d}Sin¹ [ina] á[r-ki-ia]
109. ^dNè-iri₁₁-gal [á-zi-da-mu-šè]
^{r^d}Nergal ina im-ni-ia]
110. ^dNin-urta [á-gùb-bu-mu-šè]
^d[MIN ina šu-me-li-ia]
111. lú-tu-ra-šè t[e-ge₂₆-e-dè-mu-dè s]ag lú-tu¹-r[a-ke₄] šu uš-gar-ra-mu-dè
ana mar-'^{ša}¹ ina [té-h̄e-e-a ina qaq-qad mar-ši qa-ti ina um-mu-di-ia]
(rest of column broken)

Reverse

Column v (MMA 86.11.379F)

135. [ugu lú-tu-ra-ke₄ gù-dé-mu-dè]
[ina muh-h]i 'mar-ši¹ [ina šá-se-e-a]

136. [nam-šub Eridu^{ki}-ga sum-m]u-d[a-mu-dè]
 ši-pat [eri₄]-^rdu₁₀¹ [ina] ^rna¹-d[e-e-a]
137. [udug sig₅]-ga ^dLamma sig₅-g[a da-gá hé-gub]
138. [udug ḥul]^ra-lá ḥul gedim¹ [ḥul gal₅-lá ḥul dingir ḥul maškim ḥul]
139. [.....]
140. x [.....]
- 141–42. (not preserved)
143. l[ú ḥul igi ḥul ka ḥul eme ḥul]
144. [uš₁₁ ḥul uš₁₁-zu uš₁₁-ri-a níg-AK-a níg-ḥul-dím-ma]
145. [sil₇-lá igi-mu-ta zi an-na hé-pà] zi ki-^ra¹ [hé]-pà
-
146. [ka-inim-ma udug ḥul-^ra¹-[k]am
-
147. én ^rgá-e¹ lú ^rEn¹-ki-ga me-en
 šá ^dIDIM ana-k[u]
148. gá-e lú ^dDam-gal-n[un-n]a me-en
 šá ^dDam¹-ki-^ran¹-na ana-ku
149. gá-e lú-kin-gi₄-^ra¹ ^dAs[al-lú-ḥi m]e-^ren¹
 mar šip-^rri¹ šá ^dMarduk ana-ku
150. tu₆-^rmu¹ t[u₆ ^dEn-ki-ga-ke₄]
 ^rtu¹-ú-^ra tu¹-ú šá ^dIDIM
151. tu₆-tu₆-mu t[u₆-tu₆ ^dAsal-lú-ḥi-ke₄]
 ^ršip-tu₄¹ šip-tu₄ šá ^dMarduk
152. ^rgiš-ḥur ^dEn¹-k[i-k]e₄ šu-mu mu-un-da-a[n-gál]
 ^rú¹-[su-rat] ^rdiIDIM ina qa-ti-iá ba-[šá-a]
153. gišma-nu giš[stukul m]ah an-na-ke₄ šu-mu ^rmu¹-[un-da-an-gál]
154. gišpa-gišimmar g[arz]a gal-gal-la šu-^rmu¹ [mu-un-da-an-gál]
 [a-r]a g[i-ši]m-ma-ri ^ršá¹ [par-ṣu rab-bu-tú ina qa-ti-iá na-šá-ku]
 (rest of column broken)

Reverse

Column vi

173. (traces)
174. [^d..... gá-e en-nu-un-gá ḥé-a
 ^d..... i]a-tú li-iṣ-ṣur-an-ni
175. [^dNin-girimma nin mu₇-mu₇-ke₄] ^rá¹-zi-da-mu hé-^rgub¹
 ^dMIN a-ḥa-at ^dA-nim ina im-n]i-ia li-iṣ-ziz
176. [^dNamma] ^rnin a¹-gú[b-ba] ^rdadag¹-ga-ke₄ á-gùb-bu-mu hé-^rgub¹
 ^dMIN ^rbe-let¹ MIN^e e[l]-lu ina šu-me-li-ia li-iṣ-ziz
177. [^dAsal-lú-ḥi dum]u Eridu^{ki}-ga-ke₄ gig-bi zà-ság ba-^rni-in(!)(tablet: DÈ)¹-gá-g[á]

[. . . ḥu-m]u-un-na-an-te-ge₂₆

^dMarduk ma-ri Eri₄-^ldu₁₀^l [mu]r-ṣu šu-a-tim li-is-kip zu-ku-ur-tú li(!)(tablet: *hi-iš*-t[e-h]i

- 178. (ruling: the duplicate has a rubric here)
- 179. [én ^dEn-k]i ^lugal^l abzu-ke₄ sá pà-da géštu^{min} dagal-[l]a me-en
[^dÉ-a šār ap-si-i] a-^lta-a^l <mil>-ki rap-šá uz-nu a[t-r]a
- 180. [gá-e lú-mu₇-mu₇-i]r-zu
[ana]-^lku a-ši^l-pu ^lR-^lka^l
- 181. [á-zi-da-mu-šè gen-na á-gùb]-^lbu^l-m[u-šè ta]b-ab
[ina im-ni-ia a-lik ina šu-me-li-ia ru]-su

Translation

Obverse

Column i

- 18. [Evil Utukku-demon, *Alû*-demon, ghost, gendarme-demon, god, and bailiff-demon.]
- 19. [they are evil!]
- 20. [May they not approach my body,]
- 21. [nor harm my face,]
- 22. [nor walk behind me,]
- 23. [nor enter my house,]
- 24. nor climb [over my roof],
- 25. nor [enter my living room].
- 26. [Be adjured by heaven]; be adjured [by earth].
- 27. [Incantation of *Utukkû lemnûtu*]

Reverse

Column iv

- [The incantation priest recites:]
- 103. [When I go to the] patient,
- 104. when [I push open] the door of the house,
- 105. when I shout at [his gate(?)],
- 106. when I cross the [threshold],
- 107. when I enter [the house],
- 108. with Šamaš in [front of me], and Sîn [behind me],
- 109. with Nergal [on my right],
- 110. and Ninurta [on my left],
- 111. when [I approach] the patient [and lay my hand on] the patient's head . . .

Column v

- 135. When I call out over the patient,

136. when I cast the Eridu incantation,
 137. may the good [*Udug*-spirit] and good genius [be present at my side].
 138. [Evil *Udug*-demon], evil *Alû*-demon, [evil] ghost, [evil gendarme-demon, evil god, and bailiff-demon],
 139–42. (not preserved)
 143. [Evil] man, [evil face, evil mouth, and evil tongue],
 144. [evil spell, hex, magic, and whatever evil practices,]
 145. [depart from before me.] Be adjured by heaven and be adjured by earth.
-
146. It is [an *Utukku*] *lemnūtu* incantation.
-
147. I am the man of Ea,
 148. I am the man of Damkina,
 149. I am Marduk's messenger.
 150. My incantation is actually Ea's.
 151. My spells are actually Marduk's,
 152. and Ea's master plans are in my possession.
 153. I am [holding] Anu's exalted [*e'ru*-wood scepter] in my hand.
 154. I am holding the date-palm frond of the major rituals in my hand.
 155–72. (not preserved)

Column vi

173. [...]
 174. May [...] protect me.
 175. [May Ningirrimma, sister of Anu,] be present on my right.
 176. [May Namma,] lady of the pure laver, be present on my left.
 177. May Marduk, citizen of Eridu, ward off this illness and introduce a substitute (figurine).
-
178. (It is an *Utukku* *lemnūtu* incantation.)
 179. O Ea, lord of the Apsû, provider of advice, of great wisdom,
 180. I am the exorcist, your servant.
 181. [Go to my right]; run [to] my left!

Notes

- 1–23: These lines are preserved in cuneiform in CT 16:pl. 1, col. i 1–18, and UET 6/2, 391 and 392. The beginning of the incantation, not preserved on the MMA tablet, opens with a description of evil demons who attack humans like a storm. In order to establish his credentials as a true exorcist, the incantation priest declares himself to be the emissary of the gods of incantation, Ea and Marduk. The incantation priest acts as diagnostician, examining the patient as he recites his incantation.
- 28–103: For these lines cf. CT 16:pl. 1–4, col. i 23–132. The text in the gap relates that the demons are described as messengers of Enlil, who murderously attack their human victims with disease, poison, and venom. The distraught man is also attacked by black magic, witchcraft, and sorcery. The incantation priest

reiterates his credentials as being sent by Ea and Marduk with an effective incantation that comes directly from the gods. Certain benevolent gods are then invoked to stand on each side of the incantation priest, warding off the pernicious demons as he enters the house, and the demons are warned to depart from the patient's body and not approach the body of the incantation priest himself.

- 104: For this meaning of *šerû* cf. Antagal III (MSL 17 160): 261 [šu(?)]-ús = *še-ru-ú*, although this meaning is not given in CAD Š/2, p. 330 (courtesy of W. G. Lambert).
- 113–36: Cf. CT 16:pl. 4, col. iv 153–90. The missing lines, known from duplicates, tell how the incantation priest once again warns the demons to depart both from him and from the patient, being adjured by heaven and earth. The priest again acts as diagnostician, examining the patient's limbs and flesh.
- 140–43: Cf. CT 16:pl. 5, col. iv 196–99. These lines give a catalogue of demons and diseases.
- 143: For *igi hul* as “evil face” see this writer’s remarks in *Literatur, Politik und Recht in Mesopotamien: Festschrift für Claus Wilcke*, W. Sallaberger, K. Volk, and A. Zgoll, eds. (Harrassowitz Verlag, Wiesbaden, 2003), 117.
- 155–73: Cf. CT 16:pl. 6, col. v 214–48. The incantation priest warns the demons against standing, sitting, or walking in his own habitation, and he calls for the god Ea to protect him when he visits the patient.
- 175: The Akkadian translation provides an epithet for this goddess differing from the Sumerian “mistress of incantations.” Ningirimma, however, is usually known in the god lists as sister of Enlil (see CT 24:pl. 11, l. 40; pl. 24, l. 56).
- 178: The scribe has written the signs *hi + iš* instead of *li*, probably not understanding the original from which he was copying. In the Sumerian line he erroneously wrote DÈ for IN.

26.

MMA 86.11.366 + MMA 86.11.542

Plates 40, 41

H. 117 mm W. 150 mm Th. 38 mm

Utukku lemnūtu, Tablet 12

Later 1st millennium (Babylon)

Cited here as Tablet A: ll. 11–20; 27–36; 37–47; 73–85

27.

MMA 86.11.367 + MMA 86.11.486 (+)

MMA 86.11.537

Plates 42, 43, 44

H. 116 mm W. 161 mm Th. 41 mm (MMA 86.11.367 + MMA 86.11.486)

H. 53 mm W. 24 mm Th. 19 mm (MMA 86.11.537)

Utukku lemnūtu, Tablet 12

Later 1st millennium (Babylon)

Cited here as Tablet B: ll. 85–95, 107–17, 138–49, 171, and Tablet D: ll. 136–40

28.

MMA 86.11.379B + MMA 86.11.534

Plate 44

H. 50 mm W. 58 mm Th. 17 mm

Utukku lemnūtu, Tablet 12

Later 1st millennium (Babylon)

Cited here as Tablet C: ll. 121–25

Obverse

Column i

1–10. (not present on MMA tablet)

Text No. 26

11. A [pú giškiri₆ pú ù-mi-ni-in-te-gá hí-li-bi ki ba-an-dúb]
 A [bur-tú ki-ri-i bur it]-'he-e¹-ma i-ni-i[b-ši-na it-ta-pa-as]
12. A [mú-sar-ra] 'gurun-na'-[š]è bí-in-sìg-ga úkul š[à-bi bí-in-dul]
 A [ina mu-s]a-re-e in-bi 'ir¹-hi-is-ma iš-bab-tu₄ [lib-ba-šú-nu ik-t]a-tam
13. A [^dAsa]r-alim-nun-na dumu-sag abzu-ke₄ a-a-ni ^dEn-k[i-r]a 'inim¹-bi mu-un-na-ab-bé
 A [^dMardu]k 'ma¹-ri reš-tu-ú šá ap-'si¹-i a-na a-bi-šú ^d[ID]M a-mat šu₁₀-a-tì i-qá-bi
14. A a-a-mu udug-hul múš-me-bi i-kúr-ra 'alan¹-bi i-sukud-da
 A a-bi ú-tuk-ku lem-nu šá zi-m[u]-šú nak-r[i] la-an-šú zu-uq-qur
15. A dingir nu za-pa-ág-bi i-gal-gal-la m[e-l]ám-bi i-sukud-da
 A 'ul i-lu¹ ri-gim-šú ra-bi m[e-lam-m]u-šú šá-qu-ú
16. A u₄-šú-uš-ru an-'dùl¹-bi 'kúkku¹-[ga s]u-bi zalag-ga nu-un-gál
 A 'ur-ru¹-[up šil]-la-šú uk-kul ina z[u-u]m-ri-šú nu-ú-ri ul i-ba-áš-ši
17. A 'á-úr¹ [á-ú]r-šè i-gir₅-gi[r₅-r]e nir-gal-bi la-ba-an-dib-bé-eš-šú
 A [ina pu-u]z-ra-a-tú iħ-ta-[na]-al-lu-up e-tel-liš ul i-ba-a
18. A [umbin-bi] 'zé-{im}-ta¹ bi-iz-b[i-iz]-za-bi gíri-bi uš₁₁-hul-a
 A [ina šu]-'pu-ri¹-šú mar-tu₄ it-t[a-n]a-at-tuk ki-bi-is im-ta ^{HUL}^{1u4}
19. A [^{túg}dára]-'a-ni¹ nu-du₈-a á-[n]i s[ù]-s[ù]
 A [ni-bi]t-'ta¹-šú ul ip-paṭ-tá[r i-da]-'a-šú¹ [i-ħa-am-ma-ṭu]
20. A [ki fb-b]a-'bi¹ ér diri-a 'ki¹-šár-[ra-ke₄ gù-ki]ri₆ [nu-u]n-[gá-g]á
 A [a-śar i-tag]-gu di-im-tu₄ uš-m[a-al-la-a-ma a-di šá-a-ri ta-nu-q]a-'ta¹ ul i-kal-la
 (end of column)

Column ii

- 21–26. (beginning of column broken)
27. A [im mar-d]ú [ba-gul-gul kuš₇-kuš₇ a-ra-al-la in-kúš-ù]
 A a-mu-<ru> rag-g[u(?)] na-as-pa-an-tu₄ ina a-ra-al-li-i(?) ú-šá-an-na-ah]
28. A ḥur-sag-gin₇ u₁₈-lu huš-'gal¹-[la-a-ni]
 A ki-ma šá-di-ia a-la-a [. . .]
29. A tir-mah(!)(tablet: DU)-a ri-a giškiri₆-g[in₇(?)] . . .
 A šub-tu₄ šir-[t]u₄ ra-mi-m[a ki-ma mu-sa-re-e] . . .

30. A giš-pàr-gin₇ urugal-la-aš í[b-dù]
 A GIM giš-pàr-ri ina er-ş[e-ti re-ti]
31. A lú-u₁₈-lu pap-ḥal-la ba-an-d[a-lá]
 A a-me-lu mut-tal-lik 'ú- x¹ | . . .
32. A á-šu-gìri-bi ba-an-gul-g[ul] / me-zé-bi 'í¹-nigin-e
 A meš-re-ti-şú ú-ab-bit-m[a] / is-si-şú ú-şí-i[d-ma]
33. A á-bi en ur-sag-[gá¹] . . .
 A a-ah-şu a-di 'mu¹-u[ḥ-ḥi(?)] . . .
34. A [dEn-ki lugal abzu(!)-ke₄ . . .
35. A [gú-gal á-tuk x . . .
 A a-şá-[re-du ne¹-[me-lu . . .
36. A 'dumu¹-m[u] ušumgal [x] 'x¹-ta-şè . . .
 A ma-ri 'ú-şum-gal¹-la x x [. . . a]-na nam-ta[r. . .
- (end of column)

Reverse

Column iii

37. A [é-nìgin-gar-ra èš maḥ dul-dul-la giš-ḥur bí-in-ur₅-ur₅-e-dè-e]
 A [iná É MIN É şí-i-ri pu-us-su-mì GIŠ.HUR^{meš} ú-ser-şú-nu-ti]
38. A [en-e nin-bi-şè nam-mi-in-tar-re e-ne níg ḥa-la nam-mi-in-ḥa-la-e-dè-a]
 A [a-na be-lu u be-el-tu₄ NAM^{meš} a-şim-şú-nu-ti zi-za-a-ti ú-za²-is-su-nu-ti]
39. A k[id]-k[í]d 'a-rá¹ [in-ga-zu gá-e ba-an-tar-re-eš-àm]
 A 'ep-še¹-ti-şú-nu [al-ka-ka-a-ti-şú-nu la-ma-da ia-a-şı i-şí-mu-ni]
40. A Eridu^{ki}-ga a-na [i]-[gál-la¹ [a-na nu i-gál-la]
 A ina Eri₄-du₁₀ mi-n[a]-[a i-ba¹-á[ş-şí mi-nu-ú ul i-ba-áš-şí]
41. A ki-kin-kin-àm me-m[ah-bi e₁₁]-dè]
 A a-şar şí-te-e pàr-[su şí-ru-ti şu-lam-ma]
42. A tu₆-du₁₁-ga ^dNin-ḥur-s[ag-gá kíd-kíd-bi şu maḥ-bi e₁₁-dè]
 A i-na MIN^e şá ^dBe-let-DINGIR^{meš} [up-şá-şí şí-ru-ti şá qa-ti-şú şu-lam-ma]
43. A a-rá gal-gal-la a-ra(!) búr-[ra za-e ^dNin-maḥ-a-şè búr-ra-na-ab]
 A al-ka-ka-a-tu₄ 'rab-ba¹-[ti al-ka-ka-a-tú ta-ap-şu-ru at-ta a-na ^dBe-let-DINGIR^{meš} pu-şur-şí-ma]
44. A ^dNin-maḥ nin-gal ^dSuen-n[a ama-gal Këš^{ki}]
 A ^dBe-let-DINGIR^{meš} a-hat r[a-bi-tu₄ şá ^dSîn um-mi GALⁱⁱ şá ki-i-şí]
45. A é-gu-la é maḥ-ta 'é¹-[na-ta nam an-ki-a nam dingir-re-e-ne-ke₄ şu-na [i-tuku-a(?)]
 A ina É-MIN É şí-ⁱ-r[i É-şú şí-mat AN^e u KI^{ti} şí-mat DINGIR^{meš} ina ŞU^{II}-şú i-şu]
46. A a-rá-bi ba(!)-an-zu-a sa[g ù-mu-un-na-sum]
 A ana al-ka-ka-a-t[ú la-ma-du ḥi-şá-áš-şim-ma]
47. A [dum]u-[sag¹ ^dA[sar-alim-nun-na Eridu^{ki}-ga giš-ḥur-bi i-gál-la]
 A [mar reš-tú-ú şá ina Eri₄-du₁₀ ú-şur-ta-şú şá-kin-ti]
- (rest of column broken)

Column iv

(beginning of column broken)

73. A [zabar-gin₇ hé-en-ta-su-ub udug-ḥul . . .
 A [ki-ma qe-e lim-ma-ši]š 'ú-[tuk-ku lem-nu ana ma- . . .

74. A [dingir] 'lú-ba-ke₄¹ [sag]-'gá'-[na] hé-e[n- . . .
 A DINGIR^{meš} a-me-'lu šu₁₀¹-a-tì r[e-es-su . . .

75. A [sa]g-lú-u₁₈-lu pap-'hal¹-[l]a-ke₄ m[áš . . .
 A ina re-e-šú a-me-lu mut-ta-[li-ku] ú-ri-ṣa l[i- . . .

76. A lú-u₁₈-lu-bi siskur-ra arḥus-sù šu [sa₆-g]a dingir-ra-na-a-'sè¹ h[é]-en-'ge-ge¹-[dè]
 A a-me-lu šu₁₀-a-tì ina ni-qí-i ri-i-mu [ana qa]-at dam-qa-a-tú šá DINGIR-šú 'lip¹-pa-qid

77. A máš pirig máš-ḥul-dúb-ba u-me-ni-AK
 A ú-ri-ṣa nam-ri ana MIN^{'e} e-pu-uš-ma

78. A máš-gi₆ udu-á-dara₄ máš ḥur-[sa]g-gá igi muš-bi 'gùn-gùn¹-na-bi
 A ú-ri-ṣa sal-mu im-me-ri ad-r[e]-'^e ú-ri-ṣa šá zi-mu-šu ti-'it-á¹-ri

79. A máš pirig ú-gu₇ lu-ú-a lú-u₁₈-lu-bi [ama(?)] '^dNin-<ḥur>-sag-gá-ta x x x (var. ù-tu-ud-da)
 A ú-ri-ṣa nam-ri ina ri-'i-i-t[u₄ du-u]š-šu-ú LÚ šu₁₀-a-t[i šá] x (var. '^{um}(?)¹-mi) ^dBe-let-DINGIR^{meš}
 x x-'id¹ (var. i²-al-du)

80. A máš pirig máš-hul-dúb (erasure) u-me-ni-[šu]m
 A ú-ri-ṣa nam-ri a-na MIN^{'e} tu-bu-uh-ma

81. A [k]juš máš-ḥul-dúb ka-inim-ma u-me-ni-sì
 A ma-šak MIN^e šip-[ti] 'i¹-di-ma

82. A [lú]-'u₁₈¹-lu-bi ugu-še ba-an-n[a-m]u₄(!) u-me-ni-dul
 A [LÚ š]u₁₀-a-tì mu-uh-ḥu [s]u-ba-ti-šú kut-tim-šu-ma

83. A [urud]u-níg-kalag-ga gišma-nu gl[is]-ḥul-dúb-ba ur-sag an-na-ke₄

84. A [udug ḥul-gál-e] 'gaba' an-gi₄-gi₄-àm
 A [mu-ter-ru]-'^ti¹ še-e-du lem-nu-tu

85. A [lú-u₁₈-lu pap-ḥal-la sag-gá-ni hé-ni-fb-ḥa-ze-e-d]è
 (rest of column broken)

Text No. 27

Obverse

Column i

85. B [lú-u₁₈-lu pap-hal-la sag-gá-ni] hé-ni-fb-ha-ze-e-d[è]
 B [šá LÚ mut-tal-li-ku] re-és-su li-kil

86. B [lú-u₁₈-lu-bi.] á-gig-ga 'hé¹-a
 A [.]-a
 B [LÚ šu-ú] ed-de-'šu¹-ú
 A [.]-'šu¹-[ú]

87. B [urudu-níg-kalag-ga ur-sag an-n|a-ke₄ za-pa-ág 'me-lám¹-a-ni hu-mu-ra-'ab¹-d[ah]
 88. B [^{éš}ú-li]-in gùn-a [níg-ú]r-límmu-ba úš giš-nú {zag giš-nú-da-na-ke₄} u-me-ni-nigin
 B [ú-li-i]n-nu <bur>-ru-um-[m]a-tu₄ kab-lu er-ši-šú er-bet-ti-ši-na 'li'-[m]i-i

89. B [i-izi níg-na] zag giš-nú-da-na-ke₄ u-me-ni-nigin

- B [qut-ri-in-na ník-na]q-qu i-dat er-ši-šú li-mi-i
 90. B [šá an-dùl túg-g]a-an-na-ke₄ lú-u₁₈-lu-bi karadin₅(GI.NIGIN)-na u-me-'ⁿⁱ'-ni[gin]
 B [ina lib-bi an-dùl-li šá š]u-bat a-me-lu šu₁₀-a-tì ina MIN^e šu-li(!)(tablet: ni-ta)-i
 91. B [zì-sur-ra] ù-ba-e-hur
 B [zì-sur-ra-a e]-šir-ma
 92. B [zag zì-sur-ra a im-da]ra₄-'ra' ù-ba-e-hur
 B [i-da-at MIN^e me-e ha-a-pi] e-šir-ma
 93. B [ká bar-ra á-zi-da á-gùb-b]u ù-ba-e-hur
 B [ba-ab ka-ma-a im-na u šu-me-la] e-šir-ma
 94. B [ká-bi nam-ti-la] u-me-ni-gub-ba
 B [ina ba-ab-šú ba-la-ṭa k]i-in-ma
 95. B [sag-bi nam-erim-búr-ru-da níg-ḥul-dím-ma] 'u-me-ni-pàd'
 B [ma-mit la pa-šá-ri mim-ma lem-nu zu-kur-ra(?)])
 (rest of column broken)

Text No. 27

Column ii

107. B níg-ḥul-[g]ál-e zi-ga è-bá-ra ki d'Ereš-ki-gal-ke₄
 B mim-ma 'lem'-nu te-bi ši-'i' ana áš-ri d'Ereš-ki-gal
 108. B kuš māš-ḥul-dúb-ba-[k]e₄ lú-u₁₈-lu pap-ḥal-la-ta tūm-ma
 B 'ma'-[ša]k MIN^e ina zu-'um-ri' a-me-lu mu[t-ta]l-lik ta-bal-ma
 109. B [tilla₄] sila-a sìg-ga-bi u-[m]e-ni-'kar'
 B [ina ri-bi]-i-tú šá-qu-um-meš i-ṭi-'ru'
 110. B [níg ḥul-gá]l-e ki-še hé-ni-ib-ta-an-zi-zi TUR.LÁ gal ḥa-ba-ab-tù[m]
 B [mim-ma lem-n]u ana ki'li-in-na-as-si-ih gap-šú ana 'šéh-rù-ti' [li-ib-ba-ab-la]
 111. B [a-lá ḥu]l níg nu-gar-ra ki-še ḥa-ba-tùm-'ma'
 B 'a'-lu-'u' lem-nu šá ana a-me-lu iš-šak-nu ana KI'[i] he-pí (erasure) {lem-nu šá ana a-me-lu iš-šak-nu}
 112. B māš udug si[g₅]-ga sag-gá-na nam-ba-'du₈-e'-[dè]
 B ú-ri-ṣa 'še'-e-du SIG₅' ina re-ši-šú a-'a' [ip-paṭ-ṭir]
 113. B u₄-ge₆-a 'šú-šú-bi'-ta nam-ti-la 'hé'-e[n-na-an-sum-mu]
 B mu-'ši' ur-ri ina ú-zu-uz-zi-šú TIN [lid-din-šú]
 114. B 'lú-u₁₈'-lu-bi bára-si-ga bára-mah d'Kù-[sù]
 B a-me-lu šu-ú ina 'MIN^e' para₄-mah-hu 'šá d'[Kù]-s[ù]
 115. B alan kù-ga ki na[m-ti]-la-ke₄ duu-'e'-[a . . .]
 B šal-mu (var. ku-um-mu) el-lu a-ṣar balāṭi(TIN) 'ši'-it d'UTU'li'-[. . .]
 116. B 'sirmušu(URUDU.SIG₇.KÍD.ALAN) kù-zu' [kin ga]l mah an-'na'-[ke₄ šum-gam-me kù-babbar]
 B [gur-gur-re en-qu mu-de ši]p-ri GAL' ši-[i-r]u [šá-áš-šá-ru šá sar-pi]
 117. B [gištir kù-ga] an-dùl dagal-'la'-t[a] : 'ù-me-ni-tùm(?)'
 B [ana qis-ti KÙ' šá] . . .
 (break)

Text No. 28

121. C [mu-sa₄-a-bi ba-an]-¹sa₄¹ [...] . . .
 C [šūm-šú ina DINGIR^{meš} mu-šim šim-ma-tu]
122. C [imin-bi-e-ne ere]š gaba nu-g[i sag-gá-na ba-an-su₈-su₈-ge-eš]
 C [si-bit-ti-šú-nu er-šú-t]u šá la im-[mah-ḥa-ru (var. itti[?] ^dIš-tar) ina re-ši-šú li-iz-zi-zu]
123. C [dingir lú-ba-ke₄ si]skur ḥ[é-en-na-ab-bé]
 C [šá DINGIR LÚ šu-a-tú tés-li-tu₄ liq-bu-ū]
124. C [imin-bi-e-ne ereš . . . ma]ḥ-bi a-ri-a u[g₅-ga na]m-ti-la [sum-mu níg-ḥul-gá]l-e gaba an-gi₄-gi₄-ām
 C [si-bit-ti-šú-nu er-šu-ti a-šá-re-du-ti] ¹na(?)du(?)-ši(?)-na¹ šir-tú šá ana mi-i-t[ú ba-la-ṭi
 i-nam-di-nu mu-ter-r]u-ti lem-nu . . .
125. (traces) (break)

Text No. 27

Reverse

Column iii

136. D (traces)
137. D [i áb-k]ù-g[a ga áb-šilam-ma šu ḥé-ni-ḥb-ùr-ùr]
 D [ina šá]-man ár-[hi el-le-tú še-zi-ib la-a-ti li-maš-šid-su-ma]
138. B [udug-sig₅-ga níg ḥul]-¹gál¹-[e šu-na nu-è sag-gá-na ḥé-en-gub-bu-uš]
 D [ud]ug-sí[g₅-ga . . .
 B [še-ed dum-qí š]á ina ¹šu-šú¹ [mim-ma lem-nu la uṣ-ṣu-ú ina re-ši-šú li-iz-ziz]
 D [š]e-e-du d[um-qí . . .
139. B [udug hul-gál-e ḥ]a-ba-¹ra-è¹ b[ar-ta-bi-šé ḥa-ba-ra-an-gub-ba]
 D [udu]g ḥul-g[ál-e . . .
 B [ú-tuk-ku lem-nu li]-¹si-ma¹ ina a-hat l[i-iz-ziz]
 D [ú¹-tuk-ku lem-n[u . . .
140. B [min alan esir gešpu kéš-tab-ba]-¹na¹ u-me-ni-[ḥur]
 D (traces)
 B [MIN MIN^e it-te-e šá ú-ma-ši] ¹ki¹-[iṣ]-¹ru-tu₄ e-ṣir¹-ma (var. šu-kun-ma)
141. B za[g-du₈ ba-ni-in-lá k]a-¹inim-ma u-me-ni-sì¹
 B ina [sip-pi tu-ru-uṣ]-ma [sip-ti] ¹i-di¹-ma
142. B [l]ú-¹u₁₈¹-[bi šu-sig₅-ga] din[gir-ra-n]a-¹šé¹ ḥé-en-ši-in-g[i₄-gi₄]
 B [a-me-lu šu-u ana qa-at dam-qa-a-ti šá DINGIR-šú li-ip-pa-qid]
143. B [má]š ud[ug sig₅-ga sag]-gá-¹na nam-ba-du₈-a¹
 B [ú-ri-ṣu še-e-du dam-qa-a-ti ina re-ši-šú a-a ip-pa-ṭir]
144. B u₄ g[e₆-a šú-šú-bi-ta nam]-¹ti-la ḥé-en-na-an¹-[sum-mu]
 B [mu-ṣu u ur-ra ina ú-zu-zi-šú ina ba-la-ṭi lid-din-šú]
145. B dingir ¹lú¹-[ba-ke₄ ^dUtu ag]ru[n]-¹ta è-a¹-[na]
 B šá DINGI[R a-me-lu šu-a-ti] ¹dUTU iš-tu ku¹-[um-mu ina a-ṣe-e-šú]

146. B inim-[bi-e-ne] 'ereš gaba nu-gi x¹-[gin₇ lú sag]-gá-na-a 'ba¹-an¹-su₈-su₈¹-[g]e
 B si-[bit-ti-šú-nu er-šú-tú] šá [la] 'im-ma-ḥa-ri¹ GIM 'x¹ [...] . . . a-me-lu 'šá¹ [ina] 're-ši-šú¹
 lu-ú 'ka¹-a-a-nu
147. B dingir l[ú-ba-ke₄ sisk]ur-ra [hé]-'en¹-[n]a-ab-[bé]
 B [šá DINGIR] 'LÚ¹ [šu-a]-tì t[és-li-tu₄ li]q-bu-'ú¹
148. B an 'é(?)-ta¹(?) [nam-šub] 'ba-an¹-[sì]
 B ina É 'šá šip(?)tu₄¹ i[n-n]am-du-'ú¹
149. B [tu₆-du₁₁-ga nam-šub ba-an-AK]
 B [in a MIN^e šá šip-t]u₄ uš-šá-pu
 (end of column)

Text No. 27

Column iv

(beginning of column broken)

171. B [én imin-bi an-na ḥa]-'la(?)¹ ba-a[n-ne-eš gù du₁₁-ga-bi nu-sa₆]
 B [si-bit-ti-šú]-nu ina AN^e i-zu-'zu šá¹ [ri-gim-šú-nu la dam-qa]

(The colophon is badly damaged but should contain the incipit *KAR* 24:1.)

Translation

11. After he approached [the garden-spring and well], he knocked down their fruit.
12. He flooded the fruit [in] the garden and covered [it] with weeds.
13. Marduk, the foremost son of the Abzu, addresses this word to his father Ea:
14. "My father, the evil *Utukku*-demon, whose appearance is hostile and who is tall in stature,
15. is not a god, but his voice is great, and his sheen is lofty.
16. He is dusky; his shadow is darkened; there is no light in his body.
17. (The demon) always slinks around in secret places, nor does he promenade proudly.
18. Gall is always dripping from his talons; his tread is harmful poison.
19. His belt cannot be loosened; his arms burn;
20. (the demon) fills the target of his anger with tears; everywhere he does not prevent a lament.
 (break)
27. The west wind is evil (Sum.: destructive) and prolongs(?) devastation in the *arallû*-plains(?).
28. The *Alû*-demon is like a mountain in [his] great wrath,
29. installed an exalted residence and [planted(?)] like a garden,
30. [set] into the netherworld like a trap.
31. He bound up the distraught victim,
32. destroyed (the victim's) limbs and made his jaw twitch.
33. [He . . . (the victim's)] arm up to the top of the . . . head(?)."
34. Enki, lord of the Abzu [answered him(?)]:
35. "The foremost one [. . .] benefit.
36. My son, the dragon [. . . to his(?)] fate.

37. [In the E-nigara, the exalted shrine, I designed veils for them.]
 38. [for the lord and mistress (of the temple), I decreed destinies for them; I apportioned assignments for them,]
 39. [and they decided for me that I would learn] their rituals and ways.
 40. What is there [and what is there not] in Eridu?
 41. Where search is made; [bring up to me the august] rites,
 42. with the incantation of Bēlet-ilī, [bring up to me the august rituals in her possession].
 43. As for the gravest acts, the acts that you have explained, explain it (again) to Bēlet-ilī.
 44. O Bēlet-ilī, elder sister of Sîn, [great mother of Keš],
 45. in the E-gula, the exalted temple, [where she has the fate of heaven and earth as well as the
 fate of the gods in her hands],
 46. [hurry] to her to learn the ways (of the demons)!
 47. May the foremost son Asalluhi, whose (divine) plan is present in Eridu,
 48. [reveal (it) to you; may he reveal it (especially) to you(?).]"
 (break)
73. "May (the patient) [be wiped clean like copper; may the evil *Utukku*-demon . . .].
 74. May the personal gods of that patient [be present(?)] at his head,
 75. and [may they tie(?)] the goat at the head of the distraught patient.
 76. Be kind to that man when (he is making) an offering; may he be entrusted [to] the benevolent hands of
 his personal god.
 77. Make the healthy goat into a scapegoat,
 78. (namely) a black goat, a knobbly horned sheep, or a mountain goat, whose face is colored,
 79. (or) a healthy goat, which are abundant in the pasture; (on behalf of) that man born to mother(?)
 Bēlet-ilī,
 80. sacrifice the healthy goat as a scapegoat,
 81. recite an incantation (over) the scapegoat's hide.
 82. As for that man, cover him with the hood(?) of his garment.
 83. Let the drum, *e'ru*-wood, ritual rod, Hero of Heaven,
 84. that turn away the evil spirits,
 85. support the distraught man.
 86. As for that man, . . . [. . .].
 87. May the [drum, Hero of Heaven], increase its noise and aura.
 88. Wrap a multicolored cord around the four legs of the bed,
 89. and put [incense and a] censer around the sides of his bed.
 90. [Within the protective covering] of that man's garment, lift him in reed bundles,
 91. encircle him [with *zisurra*-flour],
 92. [and next to the *zisurra*-flour], encircle him [with the liquid extract of dark clay].
 93. Put it around the [outside gate (of the temple), on the right and left sides];
 94. ensure healing [at its gate].
 95. Invoke [the Unbreakable Oath and Whatever Evil]."
 (break)
107. Get up, Whatever Evil, and go out to Ereškigal's province!

108. Carry off the hide of the scapegoat from the distraught man's body,
 109. quietly remove (the hide) from the square,
 110. so that Whatever Evil will be removed to the netherworld, so that the enormous will be turned into the trivial.
 111. May the *Alû*-demon, which is inflicted on a man, be taken into the netherworld.
 112. May the goat (acting) as a good demon not be released from his head.
 113. By its being present night and day, may (the goat) [grant] him life.
 114. On behalf of that man, on the cult-socle, the lofty dais of Kusu,
 115. may the pure statue (var. *cella*) at the place of healing [face] the sunrise.
 116–17. O craftsman, wise and *au fait* in the great important work of heaven, bring a [(refined)-silver saw to the pure grove] of ample shade.”
 (break)
 121. [(The statue's) name: “Decider of fates among the gods.”]
 122. May [the wise], unrivaled [seven (statues) stand at his head (var. with Ištar)].
 123. May [they recite the prayers of the personal god of the man].
 124. [The Seven of them, wise], august, foremost, . . . who [grant] life to the dead, turning back evil.
 (break)
 137. [May (the incantation priest) rub (the patient) with] the cream of a pure cow, [and cow's milk].
 138. [May the good demon, from whom Whatever Evil does not escape [be present at his head].
 139. [May the evil *Utukku*-demon] go out (from you); may [he stand] aside.
 140. Fashion [(two) bitumen statues of] interlocked [wrestlers];
 141. [set (them) there] on the [threshold], recite [the incantation].
 142. As for that man, may he be entrusted [to the benevolent hands] of his personal god.
 143. May the [goat (acting) as a “force for good”] not be released from his head,
 144. [but by its being present] night and day, may it [grant] him life.
 145. Of the personal god of [that] man: when Šamaš comes out from the cella,
 146. may the Seven of them—wise ones—who are unrivaled, like [. . . of] the man, at whose head they may be present,
 147. may they recite a prayer of the personal god [of that man].
 148. In the (Sum.: upper part of) the temple, [where the incantation] was recited,
 149. [through the magical formula] that activated [the incantation]
 (break)
 171. The Seven of them in the heavens, whose clamor is unpleasant, divided up. (= catch-line of UH 13–15)

Notes

- 1–11: These lines, not present on the MMA tablet, may be reconstructed from BIN 2, 22:1–22 and duplicates. They describe the *Utukku*-demon who disturbs the natural order of agriculture by causing harm to the sheepfolds, canebrakes, and fields.
- 21–27: These lines appear in BIN 2, 22:41–54. The passage describes the demon as a whirling sandstorm and as the four cardinal winds causing widespread devastation.

- 28: For the writing *šá-di-ia*, cf. W. G. Lambert, "The Gula Hymn of Bulluṣa-rabi," *Orientalia* 36 (1967), p. 130, n. to l. 38.
- 37–48: These lines have been restored from BIN 2, 22: col. ii 56–77 and unpublished duplicates. See R. Borger, *Handbuch der Keilschriftliteratur* 2 (Berlin, 1975), p. 91 s.v. AAA 22 (1935) 31ff.
- 49–72: This passage is preserved in BIN 2, 22:78–113, and Hunger, *SptU* 1, 137. Marduk appeals to Ea to reveal the secret rite. Ea instructs Marduk in the proper ritual, consisting of offering a sacrifice to the victim's personal god and the use of a scapegoat.
- 80: The sign *ba* has apparently been erased after *máš-hul-dúb*.
- 88: The final word, *li-mi-i*, is written in the margin between the two columns, probably because it was erroneously omitted.
- 96–106: These lines, not preserved in The Metropolitan Museum of Art tablets, are found in CT 16, 35:30–45, and BIN 2, 22:114 (top of rev. col. iii), and describe the scapegoat ritual, in which the goat is bound to the victim's head and the demons are thereby transferred from the victim to the goat.
- 111: The line is corrupt, with *lem* written over an erasure. The notation *he-pí* indicates that the original *Vorlage* from which the scribe was copying was damaged; the scribe tried to fill in the lacuna by restoring "the evil one who was set against the man," but the phrase is not reflected in the Sumerian version and does not belong to the line! The line is marked with an oblique wedge, indicating the tenth line from the top of the column.
- 125–37: These lines, which are preserved in CT 16, 36:1–20, list the various names of the storm-demons known from the antediluvian cities of Ur, Nippur, Eridu, Kullab, Kiš, Lagaš, and Šuruppak. The victim is to be purified with a censer and torch, and rubbed with the pure fat of a cow.
- 146: The tablet has an oblique wedge at the beginning of the line, indicating 10 lines from the top of the tablet.
- 150–70: These lines, known from BIN 2, 22:186–209, partially duplicate the incantation series known as *Bīt mēseri*. The incantation ritual involves tying a goat to the victim's head and bed, and the setting up of a reed *urigal*-standard at the victim's head. The goat is sacrificed and laid across the victim's body, to transfer the illness from the human to the animal body.
- 171: The catch-line is found as the incipit of *KAR* 24.

29.

MMA 86.11.382A, B

Utukku lemnūtu, Tablet 16

+ MMA 86.11.382C

Plates 45, 46

Later 1st millennium (Babylon)

H. 97 mm W. 128 mm Th. 37 mm

Obverse

Column i

1. [én u₄ du₇-du₇-meš dingir hul-a-meš]
[UD^{me}]§ [mut-tak-pu-tu₄ DINGIR^{me} lem-nu-tu₄ šú-nu]

2. [^dAla]d u[š-nu-gu₇] ul-ḥè-a sig₇-ga-me]š
[š]e-e-d[u la pa-du-tu₄] šá ina šu-puk AN^e ib-ba-nu-ú š]ú-nu
3. [e-n]e-ne-n[e níg-gi]g ak-a-«-a»-m[eš]
[š]ú-nu e-piš m[a-ru-uš-ti] šú-n[u]
4. [sa]g-ḥul-ha-za-'^a-[me]š u₄-'^šú-uš-e¹ [níg-ḥu]l sag giš-ra-ra ba-[an-su₈-ge-eš]
m[u-ki]l 'SAG ḤUL^{u[i]} [š]á u₄-mi-šam ana 'ḤUL^{u[i]} nir-tú ana na-a-ri 'iz¹-[za-az-zu šú-nu]
5. imin-bi-'^ata¹ [ušum-à]m i[m]-u₁₈-lu súr-ra na-na[m]
si-bit-[i-šú-n]u iš-te-en šu-ú-tu₄ ez-ze-túm-m[a]
6. min-kam ušumgal k[a g]ál-tag₄ lú na-m[e] sag nu-un-'gá¹-gá-e-d[è]
MIN^u ú-š[um-gal-l]u₄ šá pi-i-šu pi-tu-ú man-ma-an la i²-ir-ru-'ú¹
7. eš₅-kam-ma p[irig-banda] ḥuš-a-ni sa-[k]ar-{ba}-ra ba-an-dib-bé-eš
[ša]l-'^šu¹ [nim-ru e]z-'^šu¹ š[á pi-i]-ri i-ba-'^šu-ú¹
8. [limmu-kam ^{muš}mir ḥ]u-'^šu¹-ḥ[a na-nam]
[re-bu-ú šib-bu gal-ti šu-ú]
(rest of column broken)

Column ii

(beginning of column broken)

17. im-ḥ[ul im-ḥul-bi-ta du₇-du₇-meš]
it-t[i im-ḥul-li šá-a-ri lem-ni i-sur-ru šú-nu]
(rest of column broken)

Reverse

Column iii

(beginning of column broken)

41. [dingir ḥul-a-meš lú-kin-gi₄-a an-lugal-la-meš]
D[INGIR^{meš} lem-nu-tu₄] mar šip-ri ša ^dA-nim šar-ri šú-nu]
42. '^{sag-ḥul}'-[ḥa-za-meš gi₆ ba-ur₄-ur₄-ra-meš]
mu-kil reš ḤU[Lⁱⁱ] ina mu-ši it-ta-na-ar-ra-ru šú-nu]
43. níg ḥul-a [kin-kin-na-meš]
le-mut-t[u₄ iš-te-né-²u-ú šú-nu]
44. an-na šá-ga-t[a im-gin₇] kalam-ta zi-ga-meš]
[i]š-tu qé-reb AN^{1e} [ki-ma šá-a-ri ana ma-a-ti it-te-bu-ni šú-nu]
45. ^dE[n-li]l-lá šul [^dSuen-na su-mu-ug-ga-ni an-na igi-du₈ mu-un-è-a]
^dMIN šá et-li ^dSín na-an-dur-šú ina AN^e i-mur-ma]
46. [en sukka]l-a-ni ^dN[uska-ra gù mu-un-na-an-dé-e]
be-lu ana suk-ka[l-li-šú ^dNuska i-šas-si]
47. sukkal-mu ^dNuska [inim-mu abzu-še túm-ma-ab]
'suk-kal-li ^dNuska a¹-[ma-ti ana ap-si-i bi-i-li]

48. d[im]a [dum]u-mu ^dSuen-[na an-na su-mu-ug-ga-bi gig-ga]
 ^{tē-}¹ma¹ [ma-ri-ia ^dSîn šá ina AN^e mar-ši-iš i²-ad-ru]

Column iv

57. [gen-na dumu-mu ^dAsal-lú-ḥi]
 [a-lik ma-ri ^dMarduk]
 58. [dumu ge₇ u₄-sakar ^dSuen-na an-na su-mu-ug-ga-bi gig-ga]
 [mar ru-bé-e na-an-na-ri ^dSîn šú ina šamē^e mar-ši-iš i²-ad-ru]
 59. [su-mu-ug-ga-bi an-na dalla mu-un]-^{tē¹}-[a]
 [na¹-a[n-dur-šu ina AN^e šu]-pu-^{tē¹}ú¹
 60. imin-bi-^{tē¹}-[ne dingir hul-a-meš lú u]g₅(!)-meš ní nu-te-^{tē¹}gá-meš¹
 si-bit-[ti-šú-nu DINGIR^{meš} lem-nu-tu₄ muš-mi-t]u-tu la a-di-ru-tú šú-^{tē¹}nu¹
 61. imin-bi-e-n[e dingir hul-a-meš a-má-uru₅-gin₇ z]i kalam-ma ur-ur-a-meš
 si-bit-ti-[šú-nu DINGIR^{meš} lem-nu-tu₄ šá GIM a-bu]-bu te-bu-ú KUR ia-ru-ru šú-nu
 62. ^{tē}kalam¹-ma im-[mir-ra-gin₇ zi-zi-meš]
 [ana ma-a¹-[ti ki-ma me-he-e te-bu]-ú šú-nu
 63. [dub-s]ag-^{tē}ta u₄¹-s[akar ^dSuen-na súr-bi b]a-an-dib-bé-eš
 [in]a ma-har na-an-[na-ri ^dSîn ez-z]i-iš il-ta-nam-mu-ú
 64. [šu]l ^dUtu ^dIškur u[r-sag á-ni-šè á b]a-ni-fb-gi₄-gi₄
 [e]t-^{tē}lu¹ ^dUTU ^d[IŠKUR qar-du-ti] ^{tē}i¹-di-šú-nu ut-ter-r[u]
 65. ^{tē}dingir gal-gal¹-e-n[e á-úr im-m]i-in-dab-bé-e-[.]
 [DINGIR^{meš}] ^{tē}GAL¹[meš pu-uz-ra-a-ti] i-ta[h-z]u
 66. [^dA-nun-na-ke₄-e-ne ní-bi-t]a mu-un-sig-sig-e-dè
 [in]a ra-ma-ni-šú ^dMIN-nu uš-qa]-am-ma-^{tē}am¹
 67. [máš-anše ^dŠákkan-an-na-ke₄ ba-an-lù-lù téš-b]i ba-a[n-g]u₇-gu₇-eš
 [bu-ul ^dŠak-kán id-da-li-ih-ma iš-te-niš i-tak]-^{tē}ka¹-a-^{tē}lu¹(?)

Translation

Obverse

Column i

1. They are the butting storm-demons, evil gods,
2. the unsparing spirits, who were born in the base of heaven.
3. They are the agents of evil,
4. the Supporters of Evil, who are [ready] to commit murder maliciously every day.
5. Among the Seven of them, the first one is the furious South Wind;
6. the second one is a predator whose mouth is open, whom no one dares approach.
7. The third one is a furious panther, whom the bands(?) (of workers) encountered.
8. [The fourth one] is a fearsome [serpent].

(break)

Column ii

17. [They are the ones who circle around] with the evil winds.

(break)

Reverse

Column iii

41. [They are the evil] gods, [messengers of the lord Anu],
42. as Supporters of Evil, [they are always agitated at night],
43. [always looking for] trouble.
44. From the midst of heaven [they have risen up against the land like the winds].
45. Enlil [cast an observant eye over the eclipse of the] “lad” [Sîn in heaven],
46. the Lord [called] to his vizier, [Nuska]:
47. “My vizier, Nuska, [bring my message to the *apsû*],
48. and the news of my son Sîn, [who became grievously eclipsed in heaven].”

(break)

Column iv

57. [Go, my son Marduk,]
58. [the son of the prince, moon Sîn who became grievously eclipsed in heaven,]
59. [his] eclipse is apparent [in heaven].
60. The Seven of [them are evil gods]; they are [murderous] and fearless.
61. The Seven of [them are evil gods], who rise up [like a flood] and sweep over the land.
62. They are the ones who [rise up] in the land [like a storm]-wind.
63. They constantly circle furiously before the crescent [moon].
64. Once the hero Šamaš and valiant Adad had been deflected,
65. the great [gods went into hiding].
66. The Anunna-gods fall quiet by themselves;
67. the beasts of Šakkan became disturbed and devour each other.

Notes

- 9–16: These lines, broken in this text, found in CT 16, 19:21–37, describe the fifth demon as a raging lion and both the sixth and seventh demons as storms. The Seven Demons are messengers of Anu, stirring up darkness, dust, and blustering winds.
- 18–40: This passage, broken in this text, contains descriptions of gods—who are again compared to floods and storms—as bringing darkness, wind, and lightning, and as murderers on the loose. Enlil consulted Ea and appointed his children Sîn, Šamaš, and Ištar (i.e., moon, sun, and Venus) to rule over the night and day. The Seven Demons, however, disrupted the heavens, interfering with the moon, probably causing an eclipse. In the meantime, Šamaš, Adad, and Ištar were all plotting against Sîn, the moon god, and against the rule of heaven.

- 49–58: This passage, not preserved on the present tablet, is known from CT 16, 20:118–37, and *STT* 2, 166:1–6. Nuska, Enlil's vizier, runs to inform Ea of Enlil's commands. Ea is disturbed by the news and bites his lip in anguish, and he orders his son Marduk to go and perform the appropriate ritual, recorded below.
- 63: The end of the Akkadian line is written in the margin, since the scribe has failed to space the line properly, which further suggests that this is a school text rather than a library copy.
- 67: For the meaning of *akalū* in the I/2 form “to devour each other,” see CAD A/1 256.
- 67ff.: The remainder of the tablet is known from CT 16, 21:166–361, and *STT* 2, 166 (with unpublished duplicates). The incantation continues with a ritual in which strands of multicolored threads from a virgin kid and lamb are bound to the king’s limbs at the palace gate, and the usual ritual implements of *e’ru*-wood, censer, torch, and laver are used to purify the king. The demons are adjured not to approach the king, city, or palace.

Nos. 30–33

Documents of the Physician and Magician

Irving L. Finkel

Introduction

Texts Concerned with Healing

Among the many thousands of cuneiform tablets that survive from ancient Mesopotamia are a certain number that deal with sickness and disease. Some of these documents concern the diagnosis of illness, describing symptoms and establishing what is responsible for them. Others give a variety of methods for treatments and cures. From texts of these kinds, together with ancient lists of drugs and simples, or from letters that occasionally refer to medical matters, modern Assyriologists have been able to build a general picture of the work of ancient Mesopotamian doctors. Text Nos. 30–33 reflect several different sides of this picture.

To a large extent sickness and disease were attributed to external, supernatural forces. Each person had a personal god or goddess to look after him, but sometimes the system broke down, and an unprotected individual would then be vulnerable to attack by demons, ghosts, and other evil forces, who were always on the lookout for a chance to make trouble for people. All these forces were particularly prone to undermining bodily and mental health.

Diagnosis

The first job of the healer was to identify the evil responsible. To do this he turned to the Diagnostic Handbook,¹ in which symptoms were listed in detail and each was attributed to a specific cause. Often these were described as divine “hands,” such as Hand-of-Ishtar, or Hand-of-Shamash; other cases were seen as the work of Hand-of-a-Ghost. Sometimes, in contrast, disease was incurred by human sin or by breaking a taboo, a hazardous matter since it was easy to do so unwittingly. In other cases disease was attributed to human agents and was considered to be the result of sorcery worked in secret by unknown witches or wizards. Often the handbook added a prognosis such as “you need not worry,” “he will live,” or “he will die.”

Other medical conditions were viewed differently and seem to imply the concept of diseases that could arise of their own accord in the human body. Particular examples of these are various skin infections, which are identified by name in medical recipes and which often include descriptions of symptoms observed by the practitioner in his patient. Such descriptions group together medical and social symptoms that from a modern viewpoint are quite unrelated, a characteristic that has rendered our task of identifying the diseases of ancient Mesopotamia extremely complicated. Nevertheless, following the ancient attempts at diagnosis, it has been possible for modern scholars to identify from cuneiform sources, references to particular conditions such as leprosy, jaundice, epilepsy, and the like. In general the ancient Babylonians did not produce theoretical writings, and thus our picture of their approach to diagnosis and what it can tell us has to be pieced together from many different hints.

Treatment

Treatment was in the hands of two classes of practitioners, who represent two distinct approaches, the one medical, the other magical. The former class, known in Babylonian as the *asû*, “physician,” corresponds more closely to the

modern idea of a doctor than does his colleague the *āšipu*, "magician." Each had his part to play in treating the sick, and it is clear that there was no rivalry between them; some texts show explicitly that they worked together on difficult cases, and probably for most complaints both were regarded as essential.

The *asû*, or physician, would prescribe oily salves and lotions for skin problems, herbal concoctions for internal use, and fumigants that would be burned for inhalation; only rarely did he resort to magic spells. He had at his disposal a surprisingly extensive pharmacopoeia and employed hundreds of predominantly plant-based drugs, although animal parts and minerals were also included. Among the written sources available to modern scholars are lists of drugs, minerals, and other *materia medica*. The texts published in this volume include one such list, of magical stones (text No. 32), and an ancient philological commentary explaining difficult items is mentioned in another list (text No. 69). Since many of the *asû*'s recipes were in use over centuries, it is probable that these drugs often had more than a mere placebo effect. Again it is far from simple today to assess the medical effect of these recipes, since with few exceptions the plants remain unidentified for certain.

Healing ingredients were applied in a variety of ways. It is rare to find details of preparation in the texts themselves, since the recipes were usually written for fellow practitioners who were experienced professionals, but occasionally precise weights and volumes were prescribed. Often drugs were cooked or heated, and they were applied both externally (bandages, massage, lavage, salves, and pills) and internally (potions, enemas, and suppositories). There is some evidence that the *asû* also undertook elementary surgery.

The *āšipu*, on the other hand, undertook to battle head-on with the demons and devils held responsible for medical problems. To accomplish this he made use of an extensive collection of spells and incantations, amulets, and their accompanying rituals. These magical devices would exorcise the evil force that was afflicting his patient, or prevent attack in the future. Some of these magical incantations were very ancient, handed down secretly over more than two thousand years. This long history sometimes meant that individual words would become garbled and distorted, especially those written in the older Mesopotamian language of Sumerian. In other cases foreign words and names were considered to have magic properties and were incorporated into healing spells by the Babylonian practitioners. The present collection includes one fragmentary manuscript in which these phenomena can be noted clearly (text No. 31). The magic arts were considered to be the responsibility of the important god Marduk, sometimes called by his Sumerian name, Asalluhi, and the human magician often declared in his spells that he was the messenger of Marduk before whom all evil must vanish.

Many of the medical texts that have come down to us from the first millennium B.C. are collections in which treatments for a particular problem are brought together. In such texts it is common to find therapeutic and magical prescriptions side by side. This reflects the fact that in ancient Mesopotamia both approaches were regarded as equally valid and equally necessary to cure the sick.

1. See R. Labat, *Traité Akkadien de Diagnostics et Pronostics Médicaux*, Collection de Travaux de l'Académie Internationale d'Histoire des Sciences 7 (Paris, 1951), and N. P. Heessel, *Babylonisch-assyrische Diagnostik*, AOAT 43 (Munich, 2000).

Selected Bibliography

Many works that discuss Mesopotamian medicine are much outdated and thus often unreliable. The following works can be recommended:

R. D. Biggs, "Medizin," *RLA* 7 (1990), pp. 623–29

- D. Goltz, *Studien zur altorientalischen und griechischen Heilkunde: Therapie, Arzneibereitung, Rezeptstruktur*, Sudhoffs Archiv, Suppl. 16 (Wiesbaden, 1974)
- P. Herrero (M. Sigrist, ed.), *La thérapeutique mésopotamienne*, Editions Recherche sur les civilisations, Mémoire 48 (Paris, 1984)
- J. V. Kinnier Wilson, "Medicine in the Land and Times of the Old Testament," in. T. Ishida, ed., *Studies in the Period of David and Solomon and Other Essays: Papers Read at the International Symposium for Biblical Studies, Tokyo, 5–7 December, 1979* (Winona Lake, 1982), pp. 347–58
- G. Majno, *The Healing Hand: Man and Wound in the Ancient World* (Cambridge, 1975)
- E. Reiner, *Astral Magic in Babylonia*, Transactions of the American Philosophical Society 85 pt. 4 (Philadelphia, 1995)

For the cuneiform sources themselves see especially:

R. Campbell Thompson, *Assyrian Medical Texts* (London, 1923)

F. Köcher, *Die babylonisch-assyrische Medizin in Texten und Untersuchungen* 1–6 (Berlin, 1963–80)

No. 30

Gula Incantation

Introduction

The text of MMA 86.11.130 is written in a Late Babylonian script on a small oblong tablet with the writing parallel to the longer axis. It contains a single Akkadian exorcistic incantation, which would be employed in a healing context by an *āšipu*-magician (see pp. 155–56). The incantation is written out without any accompanying ritual instructions.

This tablet is one of a handful of stray items in the United States and Germany from a large medical archive of over 120 sources now largely preserved in the Department of the Ancient Near East, the British Museum. The provenance of these tablets is almost certainly Sippar; they date to the Achaemenid period. The medical tablets in this archive are all of this small size, containing only one or two prescriptions and thereby contrasting strongly with the majority of medical texts, which have many entries, often over several columns. Those tablets have every appearance of stemming from a teaching environment in which spells and recipes were imparted by dictation; for full details see I. L. Finkel, "On Late Babylonian Medical Training," in A. R. George and I. L. Finkel, eds., *Wisdom, Gods and Literature: Studies in Assyriology in Honor of W. G. Lambert* (Winona Lake, 2000 pp. 137–223). In this particular case it is interesting to observe that the tablet was written with a broken stylus that has produced superfluous wedges.

The incantation appeals to Gula and Marduk to help in the dispelling of disease and attack by ghosts, the ŠU.GIDIM.MA (Hand-of-a-Ghost) referred to in many medical texts as the source of medical problems. Two duplicates are available in the British Museum archive, BM 42454+ and BM 42399, from which some restorations have been taken.

30.

MMA 86.11.130

Plate 47

H. 50 mm W. 65 mm Th. 25 mm

Gula Incantation

Mid-later 1st millennium B.C. (Sippar)

Obverse

1. ÉN ^d*Gu-la a-sa-a-ti te-ni-še-e-ti*
 2. *tu-ka bul-ṭu li-pit-ka šul-me*
 3. *e-ma šu^{II} ub-ba-lu šá-la-mu šu-kun*
 4. ^d*Asal-lú-hi mu-bal-liṭ ADDA*
 5. *mu-pa-áš-ši-iḥ mar-şa mu-ḥal-liq lem-nu*
 6. *mu-da-ap-pí-ir nam-tar-¹ri¹*
 7. *ḥa-a-a-ṭu ḥa-a-a-i-ṭu m[ur-ṣu]*
 8. *mi-ṣit-ti ra-pa-¹du¹ [(. . .)]*

Reverse

Translation

Obverse

1. ÉN. O Gula, doctor to the people,
 2. your incantation is a cure, your touch healing;
 3. wherever I place my hands, grant well-being!
 4. O Asalluhi, who revives the dead,
 5. who soothes the sick and destroys evil,
 6. who averts fate,
 7. let Ha'ātu and Hā'iṭu, sickness,
 8. stroke, Rapādu disease,

Reverse

9. or the ghost that is within the body of the man, son of his god,
 10. before the incantation of Tutu,
 11. be distant, be far.
 12. Let it withdraw; let it retreat!

13. HUL.DÚB! Be adjured by heaven!
14. Be adjured by the underworld!
15. Let the evil tongue stand aside.

Notes

1. Beyond the opening phrase this incantation is unrelated to that beginning ÉN ^dNin-ì-si-in-na a-zu kalam-ma in BAM 3, 215:9, etc.
3. The *āšipu* speaks; see the passages quoted in CAD A/1, p. 19 s. v. *abālu*.
13. The duplicates read HUL.DÚB, either a demon or a piece of conjurer's apparatus, where the present text offers GIDIM.DÚB. This, if not a simple error, suggests that the HUL.DÚB here must be the name of a demon, addressed in the vocative. For HUL.DÚB see A. Cavigneaux, "MÁŠ.HUL.DÚB.BA," in U. Finkbeiner, R. D. Vittmann, and H. Hauptmann, eds., *Beiträge zur Kulturgeschichte Vorderasiens: Festschrift für Rainer Michael Boehmer* (Mainz, 1996), pp. 53–67.
15. DU over DU is an error for -ta-gub.

No. 31

Treatments for the Nose and Mouth

Introduction

The text of these three Late Babylonian medical fragments (MMA 86.11.426 + MMA 86.11.474 + MMA 86.11.479) contains prescriptions and incantations for afflictions of the nose and mouth, probably excerpted from a larger compilation, as exemplified by BAM 6, 533.

The first prescribed incantation is neither Sumerian nor Akkadian; it is of a type that contains garbled elements, including phrases of Elamite or Hurrian; see J. J. A. van Dijk, "Fremdsprachige Beschwörungstexte in der Süd-mesopotamischen literarischen Überlieferung," in H.-J. Nissen and J. Renger, eds., *Mesopotamien und seine Nachbarn: Politische und kulturelle Wechselbeziehungen im Alten Vorderasien von 4. bis 1. Jahrtausend v. Chr.: XXV. Rencontre Assyriologique Internationale, Berlin, 3. bis 7. Juli 1978*, Berliner Beiträge zum Vorderen Orient 1 (Berlin, 1982), pp. 97–110. In contrast, the second incantation is in Sumerian and is designed to free the patient from the conditions named ka-dib-bi-da (= *kadibbidû*, "aphasia? [and other conditions]," lit.: "holding-the-mouth"), and zi-ku₅-ru-da (= *zikurudû*, lit.: "cutting-of-the-breath"). For parallels see the Notes to this text below.

31.

MMA 86.11.426 + MMA 86.11.474

Treatments for the Nose and Mouth

+ MMA 86.11.479

Plate 48

Later 1st millennium

H. 64 mm W. 74 mm Th. 26 mm

Obverse

(beginning of obverse broken)

- 1'. EGIR *a[n-ni-i]* x 'GEŠTIN.SUR.RA¹ [...

2'. ÉN ul-*b[i-ši-in MIN 7-šú ana UGU š]ID^{nū}* ÉN èš-ZU×AB níg-n[am-mú-a ...

3'. ÉN ul-*hi-[i-in MIN an-ni-bi-i]š qu-ma-a ki-ku na-an-g[i-si-sá]*

4'. mu-bi na-an-g[i-si-s]i hu-ub-bi-in la hu-ub-bi-i[n ...

5'. gi-si-ir š[u²-u]-kul(!)(tablet: MU)-lu sa-ra-an-ni i-'ul¹-pa(?)²-an m[u-uš]

6'. ka-tab-bi ku-u[k-k]a-ad-dal te ÉN

7'. EGIR *an-ni-'i³* [KA.D]Ug.Ù(!)(tablet: HUL).DA DÙ^{uš} NÍG.NA G[I.IZI.LÁ GUB^{an}]

(rest of obverse broken)

Reverse

- 1'-11'. (broken)

12'. x bi a x [...]

13'. EGIR *an-ni-i* x x x [...]

14'. ÉN èš-ZU×AB níg-n[am-mú-a ^dEn-ki lugal abzu-ke₄ ^dAsal-lú-ḥi ka-dib ku₅-ru-da]

15'. lugal 'ḥé(!)-gál(!)¹ [ka-dib ku₅-ru-da k]a-dib ḥul-'gál¹ [zi ku₅-ru-da]

16'. x x x [x x mu₇-mu₇ abzu-a-ke₄ ka]-k[éš-bi] ^ddu₈-ù¹-da ka-dib ku₅-ru-d[a te ÉN]

17'. [DÙ.DÙ.BI] x gal *ina* A.MEŠ ¹DUB^{ak} SAḤAR TAR/BE.PI.MA *ina* IGI GABA.L[ÀL ...]

18'. [.....] 7^{ta.àm} ¹śID¹ u ÉN ka-d^lib¹ [3-śú(?)] x x (x) [...]

19'. [.....] x x ú lu 2 x [x] x x ka x [...]

20'. [.....] x (x) ŠU.SI-śú ta-x x mah(?)) x [...]

21'. [.....] x x (x) *ina* IGI^{II}-śú i-x [...]
(traces, partially erased line?)

22'. [.....] [.M]EŠ a šeš ni [...]

23'. [.....] x x [...]
(remainder broken)

Translation

Obverse

- 1'. After this [.....] drawn wine [....]

- 2'. [You re]cite the incantation “ulḥ[išin ulḥišin” seven times over it. You recite] the incantation “In the House of the Apsû, which makes everything [grow] . . .
- 3'-6'. (Text of the incantation “ulḥišin ulḥišin”)
-
- 7'. After this you perform the Mouth-Opening ritual, [set up] a brazier and a torch [. . .]

(break of about four lines)

Reverse

- 1'-11'. (broken)
- 12'.
- 13'. After this [. . .]
- 14'. ÉN In the House of the Apsû, which makes everything grow; Enki, king of the *apsû* (speaks): “Let Asalluhi be ruler over the life-threatening kadibbida!
- 15'. Kadibbida that threatens life, evil kadibbida that cuts off life,
- 16'. [the exorcist of the *apsû*] will release [the mouth bowed by its spell], life-threatening kadibbida!”
- ÉN
-
- 17'. [Its ritual: you pour [. . .] . . . into water. [You mix] dust from crossroads with honey [. . .]
- 18'. [. and you . . .] seven times; and the incantation “kadib” [three times(?)] . . . [. . .]
- 19'. (undeciphered)
-
- 20'. [.] you . . . his finger . . . [. . .]
- 21'-23'. (not translated)

Notes

Obverse

- 1': Restoration after ll. 7' and 13'.
- 2': The unintelligible (and thus tentatively transliterated) incantation ÉN ul-ḥi-ši-in ul-ḥi-ši-in, given here *in extenso*, is attested in several related versions. The closest parallel occurs in Hunger, *SpTU* 1, 46:rev. 21–27; note also K 2262+ (BAM 6, 533):rev. 58–63; K 8789+ (*AMT* 21:3+):col. ii 4'–7'; and K 11513 (BAM 6, 537):1'–5'.

Note that the incantation beginning ÉN ka ḥar šu kir ḥar šu, in EHE 333 (BAM 1, 28):7–9, more or less duplicated by K 2262 (BAM 6, 533):9–13 and BM 36515 (unpub.):4'–6' (beginning ÉN im ḥar ši ki i[r . . .]), continues with very closely related phrases.

The Sumerian incantation ÉN èš-abzu níg-nam-mú-a, given on the reverse here *in extenso*, occurs also in K 2262 (BAM 6, 533):16–21; K 2488 (*AMT* 76:5):14'–16'; K 3484 (BAM 6, 534): col. iv 5–9; EHE 33 (BAM 1, 28):13–16; and K 6025 (*AMT* 23:2):1'–4'. The incipit alone is quoted in BM 46828 (unpublished) 5'. Note that abzu is clearly written ZU×AB in ll. 2' and 14'. Such ligatures occur only in Late Babylonian texts where, e.g., DUMU×MUNUS is not uncommon, but ZU×AB, like KA₅×A in text No. 69:10 below, is less readily paralleled.

- 3': MIN restored after spacing; . . . -i]š after BAM 6, 533:rev. 59, rather than -š]e as Hunger, *SpTU* 1, 46:21.

- 5': kul(!) apparently over an erasure, but note BAM 6, 533:rev. 62: šu-x-mu-[u]l(!?). The scribe has clearly written here i-ul-pa-an, but the passage is undoubtedly corrupt; cf. Hunger, *SpTU* 1, 46:25: ku-ul-pa-nu; BAM 6, 533:rev. 62: ku-DUG-pa-an; K 8789:col. ii 7': MU-ban. One way to harmonize these variants is to propose gu(!)-ul-pa-an, ku-ul-pa-nu, ku-ul(!)-pa-an and kul(!)-pan, respectively.
- 7': Emendation of HUL to U follows, e.g., BAM 6, 533:rev. 70.

Reverse

- 15'-16': Traces at the beginnings of these lines perhaps involve erasures.
- 18': The reading ÉN ka-dib is provisional; this incantation occurs with the preceding two in BAM 1, 28:17-18; *AMT* 79:1 col. iv 1'-2'; and BAM 6, 533:24-26.

No. 32

List of Magical Stones

Introduction

This tablet (MMA 86.11.64) belongs to a well-attested group of first millennium multicolumned tablets that list the names of magical stones to be used for various prophylactic or magical purposes. It is written over six columns and originally listed a total of 303 stones. As is characteristic of the genre, the material is presented very systematically. A numbered group of stones is prescribed for a specific purpose, such as col. i 3: "Six stones to relieve an attack by Marduk." Periodically these subgroups are totaled together to form a complete unit, here as elsewhere in such texts called *turru* (DUR), "string." Thus col. i 1-18 gives section by section the particular stones to relieve attacks by Marduk, Ishtar, Sîn, Shamash, and Adad, and to "make peace" with Nuska. All six groups are then summarized in col. i 19 as follows: "[Altogether thirty-one stones: the first] string."

This pattern is repeated throughout cols. i-iv. Examination of the text reveals, however, that the scribe has not followed his prototype exactly throughout. It seems likely that col. ii 20 should properly be followed by a line that can be reconstructed as [PAP 24 NA₄^{meš} 4^u DUR], and similarly the fifth *turru* must necessarily come at the bottom of col. ii, in view of the total in col. ii for the sixth *turru* (itself erroneously thirty-two for what should be thirty-three). Also, since the four sections in rev. iv added together produce the correct total of forty-one stones forming the ninth *turru* in rev. iv 20 (leading to the reconstruction of rev. iv 6 as [13 NA₄^{meš} . . .]), there is a more serious problem concerning obv. col. iii 19-26, clearly a single passage, which has to represent both *turrus* 7 and 8. Certainly something is wrong; the simplest explanation is that the scribe has either deliberately excerpted material or, more probably, omitted a part accidentally.

After giving the total for the ninth and final *turru* in col. iv 20 the scribe calculated the total number of individual stones required to produce all nine as 303 pieces. This implies that he considered that the text of all nine *turrus* was given in the preceding columns. Individual types of stone can appear more than once, and so the final section, col. v-col. vi 28, records the number of examples of each stone that will be needed to produce each of the nine *turrus*, thus enabling the *āšipu* to be sure that he has on hand all he will need.

For an introduction to this genre of texts the reader can consult K. Yalvaç, "Eine Liste von Amulettsteinen im Museum zu Istanbul," in H. G. Güterbock and T. Jacobsen, eds., *Studies in Honor of Benno Landsberger on his Seventy-fifth Birthday, April 21, 1965*, AS 16 (Chicago, 1965), pp. 329–36. Professor F. Köcher has subsequently given a series of such manuscripts; see especially BAM 4, 368, 370, 372, 373, and 375–77, and the accompanying notes in BAM 3, pp. xxii–xxv. A new volume on this subject is expected from Anais Schuster.

32.

MMA 86.11.64
Plates 49, 50
H. 70 mm W. 76 mm Th. 29 mm

List of Magical Stones
Mid-later 1st millennium

Obverse

Column i

1. [na₄ZAGⁿ]a₄AN.BAR na₄aš-pú-u
2. [na₄ZÁLAGⁿ]a₄aba-aš-mu na₄KUR^{nu} DIB
3. [6ⁿ]a₄ME DIB^{ti d1}AMAR.UTU BÚR

4. [na₄kur-g]a-ra-^tnu¹ na₄EN.GI.ŠA₆
5. [na₄IGI K]U₆ na₄ŠIM.BI.ZI.DA
6. [na₄lu-lu-d]a-ni-tu₄ na₄KUR^{nu} DIB na₄ZÚ SIG₇
7. [7 NA₄^{meš} D]IB^{ti d1}5 BÚR

8. [na₄ . . .ⁿ]a₄DU₈.ŠI.A na₄GUG
9. [na₄ . . . na₄] ŠUBA SIG₇¹ na₄BABBAR.DIL
10. [na₄ . . .] X ŠUBA SIG₇¹ na₄aš-gi-gi
11. [na₄ . . .] X na₄dLAMMA na₄ár-zal-lá
12. [12 N]A₄ ŠILIM^{im} dPA.NÁM

13. [n]a₄aš-pu-ú na₄ZÚ GI₆
14. [2 NA₄]^{meš} DIB^{ti d30} BÚR

15. [na₄BA]L na₄KUR^{nu} DIB
16. [2 NA₄^{meš}] Š DIB^{ti d1}UTU BÚR

17. [na₄ALGAM]ES na₄SIKIL
18. [2 NA₄^{meš} D]IB^{ti d1}M BÚR

19. [PAP 31 NA₄^{meš} I']^u DUR

20. [na⁴sah-*hu-u*] na⁴IGI¹.ZÁG.GÁ na⁴ZÚ BABBAR
 21. [na⁴ZÚ GI₆ na⁴Z]Ú. SIG₇¹ na⁴*mar-hal-lu*₄
 22. [na⁴AN.BAR n]¹a⁴AN.ŠE.TIR
 23. [8 NA₄ mēš DIB^{tī} DINGIR DÙ]. A(!).BI(?)¹

(rest of column, ca. six lines, broken)

Column ii

27. [na₄.] x
 28. [. .
 (end of column)

Column iii

1. [na₄šu-u NÍTA u SAL na₄aš-gi-gi] na₄hal-[tú]
 2. na₄l GIŠ. [NU₁₁].[GAL n]a₄a-lal-l[u₄]
 3. na₄ GÍR. TAB na₄mu-ša¹ na₄aba-aš-mu
 4. 9 NA₄^{meš} di-²u NAM.ÚS.MES KU^{lum(?)}
-
5. na₄su(!)-u na₄mu-ša na₄ZÁLAG na₄KUR^{nu} DIB
 6. na₄URUDU NÍTA GIG gišMA.NU
 7. 6 NA₄^{meš} DIŠ NA A.LÁ HUL ŠÚ.ŠÚ^{šú}
-
8. na₄Z.A.GÌN na₄aba-aš-mu na₄ZÚ.LUM.MA
 9. 3 NA₄^{meš} IZKIM HUL tú ana LÚ NU TE
-
10. na₄Z.A.MUŠ : TU na₄Z.A.GÌN na₄PA
 11. 4 NA₄^{meš} DIŠ NA bi-rit BAR.SÌL^{meš}-šú KÚ^{šú}
-
12. na₄KUR^{nu} DIB(!) na₄aš-pú-u na₄ŠUBA
 13. na₄DÚR.MI.NA na₄Z.A.GÌN KUR^{šú} na₄URUDU NÍTA
 14. 6 NA₄^{meš} šA.ZI.GA
-
15. na₄aš-pú-u na₄sah-hu-u na₄TÉŠ
 16. na₄d_LAMMA na₄KUR^{nu} DIB(!)
 17. 5 NA₄^{meš} HUL MÁŠ.GI₆^{meš} pár-da-a-tu₄
-
18. PAP 33 (text: 32) NA₄^{meš} 6^{šú} DUR
-
19. na₄GUG na₄Z.A.GÌN na₄BABBAR.DIL na₄BABBAR DIL.DIL
 20. na₄sah-hu-u na₄aš-pú-u na₄mu-ša na₄ZÁLAG
 21. na₄KUR^{nu} DIB na₄EN.GI.ŠA₆<sup>na₄ŠIM.BI¹.ZI.DA
 22. na₄IGI.ZÀG.GÁ na₄KÙ¹.B[ABBAR na₄KÙ].¹GI(?)¹
 23. na₄NÍR na₄d_A¹-n[u(?)] na₄NÍR.IDIM
 24. na₄AN.ZAH na₄MIN BABBAR n[na₄MIN GI₆ na₄MUŠ.GÍR]
 25. na₄d_LAMMA na₄ZÚ¹.[LUM.MA . . .
 26. (traces)</sup>

Reverse iv

Column iv

1–3. (broken)

4. [.....] (traces)
5. [.....^{na4}K]UR^{nu} DIB ^{na4}X [(x)]
6. [.....] X NA₄^{meš} DIŠ NA EN NÍG.G[IG(?)]

-
7. [^{na4}dš-pú-u^{meš}] šá UD.SAKAR IGI^{ru} ^{na4}GU[G]
 8. [^{na4}.....ⁿ] ^{na4}BABBAR.DIL ^{na4}PA ^{na4}zib-tu₄
 9. [^{na4}.....] X ^{na4}ŠUBA sīh-ru ^{na4}mar(!)-ha[l-lu₄(?)]
 10. [^{na4}EN].^r GI.ŠA₆¹ ^{na4}IGL.ZÀG.GÁ
 11. [^{na4}I[GI] KU₆ ^{na4}KÙ.BABBAR ^{na4}KÙ.GI ^{na4}BIL.L[I]
 12. 15 NA₄^{meš} kip-di EN DUG₄-šú šu-ud-di-^ri(!)¹

-
13. ^{na4}aba-aš-mu ^{na4}ZÁLAG ^{na4}as-hur
 14. ^{na4}sag-gil-mut ^{na4}aš-pú-u
 15. ^{na4}GAL₄.LA ^{na4}ŠURUN.^dGUD
 16. ^{na4}ka-pa-ṣa ^{na4}PA ^{na4}ZI.É
 17. 10 NA₄^{meš} UŠ₁₁.ZU BÚR.RE

-
18. ^{na4}MUŠ¹.GÍR NÍTA ^{na4}mu-ṣa NÍTA
 19. ^{na4}URUDU NÍTA 3 <NA₄^{meš}> Úšmeš BÚR

-
20. PAP 41 NA₄^{meš} 9^u DUR

-
21. ŠU.NIGIN 303 NA₄^{meš} ni-bi šá DIŠ^{en} GÚ

Column v

- 1'. 5¹ ^{na4}[.....^{meš}]
- 2'. 5 ^{na4}[.....^{meš}]
- 3'. 5 ^{na4}[.....^{meš}]
- 4'. 5 ^{na4}[.....^{meš}]
- 5'. 5 ^{na4}[.....^{meš}]
- 6'. 5 ^{na4}[.....^{meš}]
- 7'. 4 ^{na4}[.....^{meš}]
- 8'. 4 ^{na4}[.....^{meš}]
- 9'. 4 ^{na4}[.....^{meš}]
- 10'. 4 ^{na4}DÚR.M{I.NA^{meš}}
- 11'. 4¹ ^{na4}mu-[ṣa^{meš}]

- 12'. 3 ^{na₄}AN.BA[R^{meš}]
 13'. 3 ^{na₄}ŠUBA ^rSIG₇^{meš}
 14'. 3 ^{na₄}ZÚ BABBAR^{meš}
 15'. 3 ^{na₄}ZÚ GI₆^{meš}
 16'. 3 ^{na₄}KÙ.GI^{meš}
 17'. 3 *ia₄-ni-bu*^{meš}
 18'. 3 ^{na₄}GIŠ.NU₁₁.GAL^{meš}
 19'. 2 ^{na₄}DU₈.ŠI.A^{meš}
 20'. 2 ^{na₄}ka-pa-*sa*^{meš}
 21'. 2 ^{na₄}ZI.É^{meš}
 22'. 2 ^{na₄}*zib-tu₄*^{meš}
 23'. 2 ^{na₄}SAG.KAL^{meš}
 24'. 2 ^{na₄}*aš-pú-u*^{meš}
 25'. šá UD.SAKAR IGI^{ru}
 26'. 2 ^{na₄}*me-ku*^{meš}
 27'. 2 ^{na₄}AMAŠ.MA₄.A^{meš}
 28'. 2 ^{na₄}GUG.GAZI^{sar.meš}
 29'. 2 ^{na₄}*as-hur*^{meš}
 30'. 2 ^{na₄}GÍR.TAB^{meš}

Column vi

- 1–2. (broken)
3. [1 ^{na₄}.] x
 4. [1 ^{na₄}z]A.^rGÌN¹.DURU₅
 5. [1 ⁿ]a₄IGI MUŠ
 6. [1] ^{na₄}*gi-rim-hi-li-ba*
 7. 1 ^{na₄}ŠURUN.^dGUD
 8. 1 ^{na₄}ŠUBA *síh*-ru
 9. 1 ^{na₄}BIL.LI
 10. 1 UR.GI₇ ZI KÙ.GI
 11. 1 AŠ.ME KÙ.GI
 12. 1 *e-din-šú-u* KÙ.GI
 13. 1 ^{na₄}HUL.GIG
 14. 1 ^{na₄}MUD
 15. 1 ^{na₄}*mi-tu₄*
 16. 1 ^{na₄}GUG KA
 17. 1 ^{na₄}PEŠ₄.ANŠE
 18. 1 ^{na₄}šu-u NÍTA
 19. 1 ^{na₄}šu-u SAL
 20. 1 ^{na₄}*hal-tu₄*

-
21. 1 ^{na₄}TÉŠ
 22. 1 ^{na₄}GIG giš_{MA.NU}
 23. 1 ^{na₄}ZÚ.LUM.MA
 24. 1 ^{na₄}dA-nu
 25. 1 ^{na₄}NÍR.IDIM
 26. 1 ^{na₄}SAG.DU
 27. 1 ^{na₄}pa-ru-tu₄
 28. 1 ^{na₄}NÍG.BÙRU.BÙRU
-
29. [ŠU.NI]GIN 303 NA₄^{meš}
 30. [ŠU] Id_{IDIM}-ib-ni A ^{lú}UMBISAG/SANGA d_{IDIM}
 31. [^{lú}SÁM]AN.LÁ MAŠ.MAŠ.TUR

Translation

Since relatively few of these stones can be identified for certain, no attempt has been made here to translate this text in full, but the information has been extracted in the form of a chart. From this it may readily be seen that the functions for which these magical stones were designed varied in nature.

Obverse

Column i

- 1–3: (types of stones) To relieve an attack by Marduk
 4–7: (types of stones) To relieve an attack by Ištar
 8–12: (types of stones) To make peace with Nuska
 13–14: (types of stones) To relieve an attack by Sîn
 15–16: (types of stones) To relieve an attack by Šamaš
 17–18: (types of stones) To relieve an attack by Adad
 19: total 31 stones, first string
-
- 20–23: (types of stones) To relieve an attack by any god
 24–ca. 29: (types of stones) To . . .
 [total . . . stones, second string]
-

Column ii

- 1–4: (types of stones) The necklace of Narām-Sîn
 5–9: (types of stones) To go with (the incantation) “šege men” (“I am favored!”)
 10: total 29 stones, third string
-

Column iii

- 1–4: (types of stones) To avert(?) headache and plague
5–7: (types of stones) To protect a man from attack by the evil *alû*-demon
8–9: (types of stones) To prevent an evil portent from approaching a man
10–11: (types of stones) If it hurts a man between his hips
12–14: (types of stones) Against impotence
15–17: (types of stones) To avert the influence of Evil Dreams
18: total 33 stones, sixth string

19–26: types of stones . . .

Note: These lines should be “seventh” and “eighth” strings. Is something thus omitted?

Reverse

Column iv

- 1–6: (types of stones) For a man under a taboo(?)
7–12: (types of stones) To deflect a plot by a litigant
13–17: (types of stones) To undo witchcraft
18–19: (types of stones) To avert plague
20: total 41 stones, ninth string
21: Grand total 303 named stones of one necklace

Column v

- 1'-30': (types of stones)

Column vi

- (types of stones)

29: Grand total 303 stones

30: [Written by] Ea-ibni, son of the Scribe (or *šangû* priest) of Ea

31: Apprentice, young magician

Notes

Obverse

Column ii

- 4: This prescription, attributed to Narām-Sîn, has been restored from the duplicates, where a similar difficulty in recording the name sometimes prevails; compare especially K 9790 (*AMT* 7:1) rev. cols. iii 6: AM-^d30. Had we but these two copies alone, one might think of King Rîm-Sîn instead (as suggested by K. Yalvaç, “Eine Liste von Amulettsteinen im Museum zu Istanbul,” in H. G. Güterbock and T. Jacobsen, eds., *Studies in Honor of Benno Landsberger on his Seventy-fifth Birthday, April 21, 1965*, AS 16 [Chicago, 1965], p. 332), but the remaining duplicates illustrate that there has been textual corruption: BAM 4, 375:col. ii 42; 376 col. iv 8: ¹Na-<ra>-am-^d30; and BAM 4, 357:5'; 372 col. ii 5: ⁽¹⁾Na-ram-^d30. On this matter see E. Reiner, *Astral Magic*, Transactions of the American Philosophical Society 85 pt. 4 (Philadelphia, 1995), p. 129 n. 607.
- 9: This probably refers to the incantation ÉN še-ga me-en.
- 13: Ur-Lamma is presumably an ancient doctor or sage.

Column iii

- 4: The reading of the final verb is unclear; perhaps emend to DIB^{tu(?)1}.
- 10: The scribe here has recorded two alternative readings.

Reverse

Column iv

- 6: The end phrase is tentatively interpreted as *bēl ikkibi*, but the expression does not seem to be supported otherwise.
- 11: ^{na}BIL.LI here (and in the summary in rev. col. vi l. 9) is rarely attested.
- 21: The reading of this line is a problem; perhaps “Total: 303 stones, the number (needed) for one necklace.”

Column vi

- 10: This item in a similar context is translated as “a stone dog (to wear on) the throat, (set in?) gold” by CAD K, p. 71 s.v. *kalbu*.
- 11: AŠ.ME = *šamšatu*, “sun disk.”
- 30–31: The scribe Ea-ibni wrote in a fine hand, despite describing himself here as an “apprentice, a young magician,” but as indicated in the notes, this text is not free of problems. No date is given, but the script could be either from the Achaemenid or Seleucid period.

No. 33

Fragment of a Neo-Assyrian Medical Text

W. G. Lambert

Introduction

MMA 56.81.52 is a small piece of a clay tablet, with edges and back trimmed to yield a rectangular plaque that is inscribed on one side only. The trimming is certainly modern, a means of representing a broken piece as a complete tablet to sell to an unsuspecting traveler. Parts of nine lines remain: of the last line of the first section, of the three lines of the second one, and of the five lines of the third section. Too little remains of the first section to identify it in any way. The second one prescribes treatment for an ear, and duplicates have not been identified so far. The third section prescribes treatment for a person afflicted by the “Hand-of-a-Ghost” and is duplicated with some variations in BAM 4, 323:75–78, and BAM 4, 471:col. iii 17–20.

A major problem of this piece is its relationship to a very similar piece known as the Ryder Amulet, published by W. Farber, in his review of F. Köcher, BAM 5 and 6 (*BiOr* 39 [1982]), pp. 598–99. The Ryder Amulet is also a trimmed piece of a tablet with parts of nine lines of Neo-Assyrian cuneiform, generally the same lines and parts as those on our fragment. Its back, however, has a relief of a female head, and the entire piece was declared a cast by its publisher. There is certainly some fakery in both pieces, since meaningless wedges appear amid the meaningful signs, in ll. 1, 2, 4, 8, and 9 of the present text, and in ll. 4, 8, and 9 of the Ryder Amulet. At a superficial glance both pieces could be declared forgeries, made from the same mold. But on closer examination this theory cannot stand. The present text has much more of the first line but lacks the ruling at the bottom of the Ryder Amulet. The MMA piece has more preserved on the right-hand side, e.g., *sa[r]* in l. 6, but less than the Ryder Amulet on the left, e.g., *gi]šbi-ni* in l. 8. Also, the added signs are not the same groups of wedges in the two pieces and do not always appear in the same places; e.g., the Metropolitan Museum text has a group of bogus wedges after the first preserved sign in l. 2 that are lacking from Ryder, and although both fill the space after *-šú* in l. 9, the fillings are different.

The Ryder Amulet has not been available to the editors of this volume for inspection, but it is said to measure 22 mm × 28 mm, while the present text measures 27 mm × 33 mm. The material of which the Ryder Amulet is made cannot be checked, but the Metropolitan Museum piece is definitely clay. Minute examination of its written surface does not suggest a cast, and the bogus wedges are clearly cut into the long-established surface. Thus the most plausible solution to the problem is that the present text is a genuine fragment of a Late Assyrian medical tablet, which was larger and probably less regular in size when it was found in the nineteenth century. A dealer acquired it and had a cast made, then trimmed down both original and cast and with a sharp metal tool filled in by hand some spaces between the original signs on both original and cast.

33.

MMA 56.81.52

Plate 51

H. 27 mm W. 33 mm Th. 7 mm

Inscribed Side

Fragment of a Medical Text

Neo-Assyrian

1. . . } x x NE(?) ši x* x* *tu-qat-tar-š[ú]*2. . . x ^{mu}]šen x* ̄.UDU KUR.GI^{mušen} ̄.UDU TU^{m[ušen]}3. . . G]UD.NÍTA SAG SU.TIN^{mušen} MUN.EME.S[AL-lim]4. . . ^{giš}]ERIN SUD ana ŠÀ GEŠTU^{II}-šú U* ŠI* GAR-an [(.)]5. . . la-az-z]i ša ^{lú}MAŠ.MAŠ ZI-šú la i-le-²-[ú]6. . .] ^úAŠ.TÁL.TÁL ^úHUR.SAG SIG₇ SA[R (.)]7. . . ^{giš}kal-ba-ni ^úár-zal-la ^útar-mu[š (.)]8. . . ^{giš}b]i-U*-ni GÌR.PAD.DU NAM.LÚ.U₁₈.LU TÉŠ-B[I (.)]

9. . .] ina KUŠ DÙ.DÙ-pi(!) ina GÚ-šú x* GAR-an [(.)]

No translation is offered. See Introduction, p. 171.

Notes

1–9: Modern, added signs are marked with an asterisk.

Documents of the Diviner: Omens

Nos. 34–35

Liver Omens

Ivan Starr

Introduction

The fragment MMA 86.11.378B belongs to a genre of Mesopotamian literature known as extispicy, or liver divination, a divinatory method of inquiry to the gods by means of the examination of the exta, that is, the entrails, especially the liver, of a sacrificial sheep. Each individual omen in such divinatory texts consists of a protasis and an apodosis, the former stating the condition of the part of the exta under consideration and the latter, the prediction resulting from that particular condition.

The fragment MMA 86.11.378B has a published duplicate of the obverse, Bu 91-5-9, 202 (CT 31, 21:6–11), from which the restorations presented in the text below are taken. This present fragment is helpful in establishing that the text deals with the caudate lobe of the liver, which the Mesopotamian diviners called the “finger” (Sum.: ŠU.SI, Akk.: *ubānu*). For purposes of both description and prediction, the diviners considered the “finger” to be a solid triangle with three surfaces, described in omens as the right, middle, and left surfaces of the “finger.” For example, ll. 3’–4’ in this text deal with the right/left surfaces of the “finger.” A transliteration and translation of the fragment, restored with the help of the published duplicate Bu 91-5-9, 202 (CT 31, 21), follows here.

The tiny fragment MMA 86.11.549 also belongs to the extispicy literature, but not enough of it is preserved to indicate which part of the liver it deals with. The only part of the liver mentioned is the “path” (Sum.: GÍR, Akk.: *padānu*).

Selected Bibliography

- U. Jeyes, *Old Babylonian Extispicy: Omen Texts in the British Museum* (Leiden, 1989)
R. Leiderer, *Anatomie der Schafsläber im babylonischen Leberorakel: Eine makroskopisch-analytische Studie* (Munich, 1990)
I. Starr, *The Rituals of the Diviner*, *Bibliotheca Mesopotamica* 12 (Malibu, 1983)

34.

MMA 86.11.378B

Plate 51

H. 21 mm W. 29 mm Th. 4 mm

Obverse/Reverse(?)

Fragment of a Liver Omen

Later 1st millennium

1'. [BE . . . Š]U.SI KAR-ma 10 ŠÀ.NIGIN ZÉ S[U]H[U]Š^{meš}-šá 15 u 150 zl^{meš} u gīšTUKUL TA 150 ana 15 zl . . .

- 2'. [...] x IGI ÉRIN-ni ana KUR KÚR *ih-hab-bat-m[a tam-ṭa-a-tum GAR^{meš}-šú-ma SUD-sà ana KUR-šú GUR^{ra}]*
 3'. [BE *ina*] SAG EDIN 15 ŠU.SI KAR-*tum* NU šu-[*su-tum GAR^{at} SÌ-iṣ SAG.DU ÉRIN-ni*]
 4'. [BE *ina*] SAG EDIN 15 ŠU.SI KAR-*tum* NU šu-*ṣ[u-tum GAR^{at} SÌ-iṣ SAG.DU ÉRIN KÚR]*
 5'. [BE . . . 1]5 ŠU.SI *ana 3šú KAR LAL^{meš}-ú-a [LAL^{meš}-šú-nu LAL^{meš} KIN.KIN-ma . . .*
 6'. [BE . . . 15(?) ŠU].SI *adi 6šú KAR LAL^{meš} KUR [LAL^{meš}-šú-nu LAL^{meš} KIN.KIN-ma . . .*
 7'. (traces)

Translation

Obverse/Reverse(?)

- 1'. [If . . . of the “fing]er” is stunted, there are ten coils of the colon, the b[ase] of the gallbladder [is firm on the right and on the left, and a “weapon”-mark rises from left to right . . .
 2'. [. . .] my army will make an incursion into the enemy’s country but will suffer shortages and will return empty-handed to its own country.
 3'. [If] there is a non-ex[iting] stunted part [on] the top of the right surface of the “finger”—[total defeat of my army].
 4'. [If] there is a non-ex[iting] stunted part [on] the left surface of the “finger”—[total defeat of the enemy’s army].
 5'. [If the rig]ht [. . .] of the “finger” is stunted in three places—my captives [will capture their captors (and) will keep sending(?)] . . .
 6'. [If the right(?) . . . of the “fin]ger” is stunted in six places—the enemy’s captives will capture their captors (and) will keep sending(?)] . . .

Notes

- 1’-2’: It is not clear if the long protasis of l. 1 continues into l. 2. Ll. 1-2 are the opposite omen of the two lines preceding in the duplicate CT 31, 21:4-5 [BE . . . ŠU.S]I KAR-*ma* 10 ŠA.NIGIN ZÉ SUHU^{šmes}-šá 15 *u* 150 *z1meš u GIŠ.TUKUL TA 15 ana 150 z[i . . . K]ÚR ana KUR.MU ih-hab-ba-tam-*ma tam-ṭa-a-tum GAR^{meš}-šú-ma SUD-sà ana KUR-šú GU[r-ra]*], “[If . . . of the ‘fing]er’ is stunted, there are ten coils of the colon; the base of the gallbladder is firm on the right and on the left, and a ‘weapon’-mark rises from right to left [. . .], the enemy will make an incursion into my country but will suffer shortages and will return empty-handed to his own country.”*
- 3’: For the difficult *nēkemtum* (KAR)-*tum la šūšūtu* see U. Jeyes, *Old Babylonian Extispicy: Omen Texts in the British Museum* (Leiden, 1989), p. 133. She translates *la šūšūtu* as “non-extractive.”
- 5’: For an old Babylonian version of the apodosis see YOS 10, 36:col. iii 18-19. For this and other references see *ibid.*, p. 109. The meaning of KIN.KIN in this context is not clear.

35.

MMA 86.11.549

Plate 51

H. 25 mm W. 21 mm Th. 7.5 mm

Obverse / Reverse(?)

- 1'. [..... EGI]R *ana GÍR* [...]
- 2'. [..... EG]IR *ana GÍR x* [...]
- 3'. [.....] x 150 GÍR IGÍ [...]
- 4'. [.....] KUR-*ka SAL* [...]

Fragment of a Liver Omen

Later 1st millennium

Translation

- 1'. [...] the rea]r [...] the “path” [...]
- 2'. [...] the re]ar [...] the “path” [...]
- 3'. [...] faces the left of the “path” [...]
- 4'. [...] your country [...]

Notes

- 1'-2': There is not much that can be said about this tiny fragment, but in ll. 1'-2' one would expect EGIR to be followed by the part of the exta under consideration.
- 3': Restore perhaps ... EGI]R 150 GÍR IGÍ [...], [...], “it faces the [rea]r of the left of the ‘finger’ [...].”

Nos. 36–38

Celestial Omens

Erica Reiner

Introduction

Mesopotamians sought to learn what the future holds from every conceivable event and manifestation of the world around them. Gods gave signs through such happenings, and if properly read, the future that they predicted could be averted through penitence, prayer, and appropriate apotropaic rituals. Some signs came unprovoked, through strange happenings in house and fold and in the sky; others could be provoked by procedures such as pouring oil on water and observing the shape taken by the oil drop, but especially by inspecting the entrails of the lamb sacrificed for just such a purpose. This procedure, called hepatoscopy or extispicy, is the most ancient and most tenacious of all the Babylonian divinatory techniques, eventually reaching Italy through the Etruscans. Another technique practiced by the Etruscans, divination from thunder (brontoscopy), also had its antecedents, no doubt, in Babylonia, where the meteorological omens formed part of the larger collection of celestial omens. Hepatoscopy remained the main means of consulting the will of the gods, even as divination from celestial bodies was gaining in importance; as late as in the reign of King Nabonidus (556–539 B.C.) the portents of celestial omens had to be tested by submitting queries about them to the haruspex.

An abundant correspondence from the Neo-Assyrian empire attests to the importance at the royal court of the diviners and astronomers, who apprised the king of the portents, and also of the exorcists, who were expert in averting ill-boding forecasts by performance of rituals.

Among The Metropolitan Museum of Art cuneiform texts are several celestial omens. The series of celestial omens, called by its incipit, *Enūma Anu Enlil* (henceforth abbreviated as *EAE*), comprises seventy books (that Assyriologists normally call “tablets”) dealing with celestial and meteorological phenomena. The first twenty-two books or tablets derive omens, that is, predictions, for the fate of king and country from lunar phenomena: the moon’s general appearance, such as the shape of the horns, halos, conjunctions, and especially eclipses. The following tablets, up to Tablet 37, deal with solar phenomena: again halos, also colors, and solar eclipses. In Tablets 37 to 49 meteorological phenomena—thunder, lightning, rainbows, and winds—are treated. The final group, Tablets 50 to 70, derives omens from planets and fixed stars.

Two of the Metropolitan Museum tablets are part of the series *EAE*. MMA 86.11.353 (text No. 36) deals with the sun, and although it is incomplete, it can be restored with the help of its duplicates, which are edited as *EAE* 27 (28) Parts II and III by W. H. van Soldt, in *Solar Omens of Enūma Anu Enlil: Tablets 23 (24)–29 (30)* (Leiden, 1995). Another partial duplicate, *ACh Šamaš* 20 II. 5–9, duplicates rev.: II. 7’–10’ of MMA 86.11.353.

MMA 86.11.303 (text No. 37) belongs to the last section of *Enūma Anu Enlil* and deals with phenomena concerning the planet Jupiter. The name for this planet was always written with a Sumerogram, SAG.ME.GAR, usually preceded, as it is here, by the sign MUL, “star,” or by the sign DINGIR, “god.” The referent of these signs is the planet Jupiter, and neither how the planet’s name was pronounced in Sumerian nor its Akkadian name is known. The text is an excerpt of twenty-four omens from some larger collection. We learn this from the subscript, which states: “24 entries, [up to its] end; [from/after . . .] written and checked, by (lit.: ‘hand of’) PN,” the name of the scribe, which is

now broken. Most of the omens can be reconstructed from parallel texts; the purpose of excerpting these particular omens is not stated.

MMA 86.11.287D (text No. 38) preserves a few omens on the visibility of Mercury. The Mercury tablet's interest is that according to its colophon it was copied from a *magallatu*, "parchment scroll." Such scrolls are sparsely attested in the cuneiform literature; see *CAD M/1*, p. 31 s. v. *magallatu*; several attestations in the Neo-Babylonian text published in VAS 6 and Notes Brèves, *RA* 72 (1978), p. 96 were identified by M. W. Stolper. The catch-line that introduces the colophon may be restored as [šumma . . .] x *ina itiBÁR KUR-ha 25 UD^{meš}* [. . .], "[If Mercury(?)] rises in the month of Nisannu (and) [remains in the sky] for 25 days."

The longest and most interesting text of this group is MMA 86.11.287 (text No. 71), which has been identified by A. J. Sachs as a commentary.

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36.

MMA 86.11.353

Enûma Anu Enlil, Tablets 26, 27

Plate 52

Later 1st millennium

H. 58 mm W. 71 mm Th. 23 mm

EAE 27 (28) Obverse

Part II

7. 1'. [DIŠ MAN *ina BAR u₄-mi* GIŠ.H]UR ¹NÍGIN u¹ K[UR-šú da²ummeš GÁL . . .]
8. 2'. [DIŠ KUR MAN ÚŠ SUD] u UD.DA-su ¹ka-ṣa¹-át [*ina KUR SAL.KÚR GÁL*]
9. 3'. DIŠ [MAN KUR-ma si]G₇ ṣa-ri²p u UD.D[A SIG₇ LUGAL *ina KUR KI.TUŠ-su NU TUŠ-ab*]
10. 4'. DIŠ [MAN] KUR-ma {d}u-¹um-ma u UD.DA [SIG₇ ŠU.BI.DIL.ÀM]
11. 5'. DIŠ MAN KUR-ma {d}u-¹um-ma u UD.¹DA GIM¹ [IZI TAB-át LUGAL KUŠ₇-tim *ina KUR GAR*]

12. 6'. DIŠ MAN KUR-ma ¹IGI¹.BAR-ma UD.DA-su DARA₄-meš GÁ[L ba]r(?)-tum ina KUR GAR- a[n KÚR
KUR KAR²]
13. 7'. DIŠ MAN IGI.BAR-ma UD.DA-su [da-²-u]m-meš GÁL [...]]
14. 8'. DIŠ MAN IGI.BAR-ma UD.¹DA¹-su gal-ta-at ša ša pa ak MAN KI.MIN [...]]
15. 9'. DIŠ ina ¹išE MAN iš-qam-ma UD.DA-su GIM IZI TAB-at ŠE.[GÙN.NU ina KUR . . .]
16. 10'. [DIŠ] ina x x x -šú SA₅ GAR šá NU ge-ru-ú ina GIŠ.TUKUL ŠUB-ut : DIŠ Sin u MAN UD.DA- s[u(?)-
nu(?) . . .]

EAE 26 (27)

Part III

2. 11'. [DIŠ MAN] ina *hu-pe-e* IM.DIRI BABBAR ŠÚ UD ŠÚ-am :
3. DIŠ MAN ina *hu-pe-e* [zi-ka-ri ŠÚ . . .]
4. 12'. [DIŠ MAN i]na *hu-pe-e* IM.DIRI ŠÚ IM.ŠÈG SUR :
5. DIŠ MAN ina *hu-pe-e* [IM.DIRI ŠÚ(?) . . .]
6. 13'. [DIŠ MAN ina KU]R-šú ša-bi-ḥa a-rim IM.ŠÈG.GÁ :
7. DIŠ MAN ina ¹KUR¹-šú ša-[bi-ḥa . . .]
9. 14'. [DIŠ MAN ina ŠÀ IM].DIRI BABBAR ŠÚ UD ŠÚ AN NU SUR [...]]
10. 15'. DIŠ MAN ina ŠÀ IM].DIRI SA₅ ŠÚ [...]]
11. 16'. [DIŠ MAN ina ŠÀ IM.D]IRI ¹SA₅¹ ŠÚ [...]]
(rest of obverse broken)

ACh Šamas̪ 20 Reverse

- 1'-6'. (traces; several of these lines seem to correspond to ll. 1-4 of the parallel ACh Šamas̪ 20)
5. 7'. [DIŠ MAN UG]U-nu-šú KI.MIN ¹UGU¹-[nu ^dTI]R.AN.NA IG[i . . .]
6. 8'. [DIŠ MAN] ina TÙR MUL^{[m]eš} [ŠÚ ŠÚ . . .]
7-8. 9'. [DIŠ MAN] ina SA₅ ŠÚ ŠÚ MU NÍG.¹SI.SÁ¹ x [(. . .) : DIŠ . . .]
9. 10'. [DIŠ MAN ina] GAL-šú IM.¹DIRI¹ x [. . .]
(traces)

Translation

Obverse

- 1'. [If the Sun is surrounded at noon by a] “drawing” and its appearance is darkish—[there will be an eclipse of the Moon or the Sun].
2'. [If the sunrise is spattered with blood] and its light is cool—[there will be hostilities in the country].
3'. If [the Sun rises and is] (as if) tainted green and the light is [green—the king will not reside in the land in his(?) residence].
4'. If [the Sun] rises and is dark, and the light is [green—the same].

- 5'. If the Sun rises and is dark, and the light is as hot as [fire—there will be a king bringing destruction in the country].
- 6'. If the Sun rises and when it becomes visible its light appears darkish—there will [be re]bellion in the land, [an enemy will plunder the country].
- 7'. If the Sun when it becomes visible its light appears darkish—[. . .]
- 8'. If the Sun when it becomes visible its light quivers(?)— . . . ditto [. . .]
- 9'. If in Addaru (i.e., month 12) the Sun climbs high and its light is as hot as fire—speckled barley [will . . . in the land].
-
- 10'. a [If] in its . . . it has a red spot—one who is no foe will die by the weapon.
- 10'. b If the light of the Moon and the Sun [. . .]
- 11'. a [If the Sun] sets in broken-up(?) white clouds—the day will be dark.
- 11'. b If the Sun [sets] in broken-up(?) [male clouds— . . .]
- 12'. a [If the Sun] sets in broken-up(?) clouds—it will rain.
- 12'. b If the Sun [sets] in broken-up(?) [. . . clouds— . . .]
- 13'. a [If the Sun at] its rising is covered by a halo(?)—it will rain.
- 13'. b If the Sun at its rising [is covered by a . . .] halo—[. . .]
- 14'. [If the Sun] sets within a white cloud—the day will be dark but it will not rain.
- 15'. [If the Sun] sets within a red cloud—[. . .]
- 16'. [If the Sun sets within a red] cloud—[. . .]

Reverse

- 7'. [If the Sun] is seen over it, variant—over a rainbow [. . .]
- 8'. [If the Sun sets(?)] in a halo of stars—[the king of Amurru will die].
- 9'. a [If the Sun] sets(?) in redness(?)—the land(?) [will see fine] justice.
- 9'. b [If the Sun sets(?) in blackness— . . .]
- 10'. [If the Sun in] its setting [is surrounded by] a cloud—[. . .]

Notes

Obverse

- 8': In both the present text and K. 7849:16' [EAE 27 (28) Part II 14] the signs *ša ša pa* are clear.
- 13'-14': Line 8 of EAE 26 (27) Part III, *šumma Šamaš ina qereb šamē innamir*, “If the Sun becomes visible in the middle of the sky,” which is attested in two sources, is omitted in the present text.

Reverse

The beginning of the preserved text contains traces of six lines that seem to correspond to ll. 1–4 of the parallel *ACh Šamaš* 20.

7'-10': The few preserved lines of the reverse parallel Rm. 592 (J. A. Craig, *Astrological-Astronomical Texts Copied from the Original Tablets in the British Museum and Autographed by James A. Craig*, Assyriologische Bibliothek 14 (Leipzig, 1899), no. 53 = *ACh Šamaš* 20, collated by C. B. F. Walker) ll. 5-9. Whether or not this very fragmentary reverse, which contains omens similar to those of *EAE* 26 (27) Text G (W. H. van Soldt, *Solar Omens*, p. 84), is paralleled by *EAE* 26 (27) Part IV cannot be established.

Remarks

This text is a partial duplicate to *Enūma Anu Enlil* (*EAE*) Tablets 26 (27) Part III and 27 (28) Part II, published by W. H. van Soldt in *Solar Omens*. Restorations are from the published texts, but it should be noted that the Metropolitan Museum text itself helps to restore parts of the text of Tablets 26 (27) and 27 (28).

37.

MMA 86.11.303

Plate 53

H. 54 mm W. 46 mm Th. 20 mm

Enūma Anu Enlil, Excerpts

Later 1st millennium

Obverse

1. [DIS] ¹MUL¹.SAG.ME.¹GAR¹ ana x [. . .]
2. DIŠ MUL.SAG.ME.GAR i-t[u-ú] ^dSin DU . . .
3. DIŠ MUL.SAG.ME.GAR ina ZA[G] ^dSin DU . . .
4. DIŠ MUL.SAG.ME.GAR ina GÙ[B] ^dSin DU . . .
5. DIŠ MUL.SAG.ME.GAR ana IGI [^dSin DU . . .]
6. DIŠ MUL.SAG.ME.GAR ina EGI[R] ^dSin DU . . .
7. DIŠ MUL.SAG.ME.GAR ina SI Z[AG] ^dSin DU . . .
8. DIŠ MUL.SAG.ME.GAR ina SI GÙ[B] ^dSin DU . . .
9. DIŠ MUL.SAG.ME.GAR ina ŠÀ SI Z[AG] ^dSin DU . . .
10. DIŠ MUL.SAG.ME.GAR ina ŠÀ bi-ri[t] ^dSin DU . . .
11. A[N] . . .
12. DIŠ MUL.SAG.ME.GAR ana ŠÀ ^dSin TU [. . .]
13. DIŠ MUL.SAG.ME.GAR ana SI-šú ŠÁ Z[AG] . . .
14. DIŠ MUL.SA[G.ME.GAR] . . .

Reverse

15. DIŠ MUL.S[AG.ME.GAR] . . .
16. DIŠ MUL.SAG.ME.[GAR] . . .
17. DIŠ MUL.SAG.ME.GAR ana GÙB [. . .]
18. DIŠ MUL.SAG.ME.GAR ana ŠÀ ^d[Sin . . .]

19. DIŠ MUL.SAG.ME.GAR *u* ^d*Sin* x [. . .]
20. DIŠ MUL.SAG.ME.GAR ^dŠul-[*pa-è* . . .]
-
21. DIŠ MUL.SAG.ME.GAR *ina IM.* ^IU_x^I.[LU . . .]
22. DIŠ MUL.SAG.ME.GAR *ina IM.*[SI.SÁ . . .]
23. DIŠ MUL.SAG.ME.GAR *ina IM.*[KUR.RA . . .]
24. DIŠ MUL.SAG.ME.GAR *ina IM.*[MAR.TU . . .]
-
25. DIŠ MUL.SAG.ME.GAR Á I[M . . .]
-
26. 24 MU.ŠID.IM ZAG.TI[L.LA.BI.ŠÈ . . .]
27. [*šá*]-*tir-ma* È GIŠ ^IX[. . .]
28. (traces)

Translation

Obverse

1. If Jupiter [. . .] to [. . . the Moon . . .]
2. If Jupiter [stands] beside [the Moon . . .]
3. If Jupiter [stands] at the right [of the Moon . . .]
4. If Jupiter [stands] at the left [of the Moon . . .]
5. If Jupiter [stands] to the front [of the Moon . . .]
6. If Jupiter [stands] behind [the Moon . . .]
7. If Jupiter [stands] in the [right] horn [of the Moon . . .]
8. If Jupiter [stands] in the left horn [of the Moon . . .]
9. If Jupiter [stands] in the middle of the right horn [of the Moon . . .]
10. If Jupiter [stands] inside the middle(?) [of the Moon . . .]
11. [. . .]
12. If Jupiter enters into the Moon [. . .]
13. If Jupiter [. . .] into its right horn [. . .]
14. If Jupiter [. . .]

Reverse

15. If Jupiter [. . .]
 16. If Jupiter [. . .]
 17. If Jupiter [. . .] to the left [. . .] . . .]
 18. If Jupiter into [. . . the Moon] . . .]
 19. If Jupiter and the Moon [. . .] . . .]
 20. If Jupiter [. . .] ^dŠul[*pa-e* . . .]
-

21. If Jupiter [...] in the So[uth] . . .
22. If Jupiter [...] in the No[rth] . . .
23. If Jupiter [...] in the Ea[st] . . .
24. If Jupiter [...] in the We[st] . . .

25. If Jupiter . . . [. . .]

26. 24 lines, [up to its] end [. . .]
27. written and checked, “hand” of [. . .]

38.

MMA 86.11.287D

Plate 54

H. 34 mm W. 53 mm Th. 23 mm

Obverse/Reverse

Fragment Regarding the Visibility of Mercury
Later 1st millennium

- (fragment from the bottom of a tablet, preserving the left-hand part of the last five lines)
(traces)
- 1'. [. . . ina] ^{iti}ÁŠ ŠÚ-bi [. . .]
 - 2'. [. . .] ina ^{iti}ŠE ŠÚ-bi x [. . .]

 - 3'. [(x) ^dGU]D.UD ina ^dUTU.È.A [. . .]

 - 4'. [šumma . . .] x ina ^{iti}BÁR KUR-ha 25 UD^{meš} [. . .]
 - 5'. [. . .] šá KUŠ ma-gal-lat GABA.RI E^{ki} šá-! [i-ir . . .]

Other Side

- (only traces of three lines remain)
1. . . x+]6.40 [. . .]
 2. . . .] x ŠÚ-bi 20(?) [. . .]
 3. . . .] x x [. . .]

Translation

- 1'. [. . .] sets [in] Šabātu (i.e., month XI)
- 2'. [. . .] sets in Addaru (i.e., month XII)

- 3'. [If(?)] Mercury in the East [. . .]

4'. [If(?) Mercur]y(?) rises in Nisannu (i.e., month I) [and remains in the sky] for 25 days [. . .

5'. [. . .] of a leather scroll, copy of Babylon, written by [. . .

Other Side

1–3. (too fragmentary for translation)

Notes

1'–5': This fragment from the bottom of the tablet preserves the left-hand part of the last five lines.

4': Mercury is expected at the end of the initial break, but the traces (see copy) do not seem to permit a reading GUD.U]D.

Edge: Note also the sign inscribed on the edge of the tablet.

No. 39

Omens of Daily Life: *Šumma ālu*

Sally Moren Freedman

Introduction

MMA 86.11.356 is a fragment of Tablet 17 of the omen series *Šumma ālu in mēlē šakin*, “If a City Is Set on a Height.” *Šumma ālu* is an encyclopedic compendium of omens taken from everyday occurrences. Topics include omens derived from events associated with the site of a city or the construction of a house, from the appearance of fungi or phantoms, and from the movements of animals, reptiles, and birds. In its most developed form, dating to the middle of the seventh century B.C., *Šumma ālu* contained some ten thousand omens organized by topic into a sequence or series of more than one hundred tablets.

The present text is a fragment of Tablet 17, which lists fifty omens associated with the construction of a well, plus two separate rituals. The complete text appears in S. M. Freedman, *If a City Is Set on a Height* 1, Occasional Publications of the Samuel Noah Kramer Fund 17 (Philadelphia, 1998). MMA 86.11.356 obverse corresponds to omens 32–45 of *Šumma ālu* Tablet 17; the reverse corresponds to omens 46–50, of which the last three include rituals for averting the evil portended by the omens.

39.

MMA 86.11.356

Plate 55

H. 45 mm W. 51 mm Th. 26 mm

Šumma ālu, Tablet 17

Later 1st millennium

Obverse

- 1'. DIŠ A-[ša GIM A ÍD IR-in ...
- 2'. DIŠ A-š[a GIM KAŠ : bi-i²-šú KÙ ...

- 3'. ina ^{iti}BÁRA ¹PÚ¹ BAD [ina-an-ziq]
- 4'. DIŠ ina ^{iti}GU₄ [ŠE.IM ih-ha-šah]
- 5'. DIŠ ina ^{iti}SIG₄ [ŠE-im TUK-ši]
- 6'. DIŠ ina ^{iti}ŠU [DAM LÚ BA.UG₇]
- 7'. DIŠ ina ^{iti}NE [SAG.GÉME.ARAD TUK-ši]
- 8'. DIŠ ina ^{iti}KIN [DUMU.NÍTA NA UG₇]
- 9'. DIŠ ina ^{iti}DU₆ [i-dam-mi-iq]
- 10'. DIŠ ina ^{iti}APIN [(x) x-e ARAD]

-
- 11'. DIŠ *ina*^{iti}GAN [NA BI *iḥ-ha-šah*]
 12'. DIŠ *ina*^{iti}AB [TIL *u₄-mi*]
 13'. DIŠ *ina*^{iti}ZÍZ [*ka-bat SAG.DU*]
 14'. DIŠ *ina*^{iti}ŠE [*UGU EN DU₁₁-šú GUB-za*]
-

Reverse

1. DIŠ NA PÚ *i-pé-e|š* NA BI *šum₄-ma* ŠU DINGIR *šum₄-ma* ŠU LUGAL KUR-su]
 2. DIŠ NA PÚ DÙ-uš-ma *it-t[a-na-ad-lah]* NA BI NIG₂.GA-ŠÚ DUMU É NA BIR]
 3. DIŠ NA PÚ *la-bi-ir-ta* DÙ-u[š a-na UB.DA.LÍMMU.BA ŠÁ PÚ 4 UR.GU.LA Šá GIŠ.ŠINIG GAR-an 7 ŠE 〈KÙ〉.BABBAR *mi-šil*]
 4. UMBIN GU₄ ɻ.GIŠ 〈ɻ〉.SAG ɻ.[GIŠ.ERIN ZÍD ŠE.MUŠ₅ ZÍD ZÀ.ḤI.LI.SAR *e-ma tu-ub-qí tu-tam-mar u SAḤAR PÉŠ.A.ŠA.GA ŠUB-ma* PÚ DÙ-uš]

 5. DIŠ NA PÚ *ina* DUG.NÍNDA DÙ-uš IGI GU₄.UD.KU₆ Á.[ZI.DA u Á.GÙB.BU *ina* MUN NÁ-al]
 6. *ina*^{dug}BUR.ZI.SALLA NU ŠEG₆.GÁ ŠÚ-ap [4 ŠE KÙ.BABBAR mi nu qar tī^{na}HAR AD.BAR UMBIN GU₄]
 7. LÀL ɻ.NUN.NA *ana qir-bi-nu* ŠUB-di *ana* UGU [ZÍD ŠE.MUŠ₅ ZÍD ZÀ.ḤI.LI.SAR ŠUB.ŠUB-ma PÚ BI SI.SÁ]

 8. [DIŠ N]A PÚ *ina* É.BI BAD ɻ lu UD-ma BAD-ú [*ana* ḤUL BI LÚ NU SÁ.SÁ iš-tu PÚ]
 9. [*he-r*]i-a-at-ma *ana* A-ša ŠUB-at [*la-ma* GIŠ¹.[ɻ.ŠUB *na-dim-ma* SIG₄.AL.ŪR.RA *ba-ša-mi*]
(remainder broken)
-

Translation

Obverse

- 1'. If [its] water [smells like river water . . .
 - 2'. If [its] water [is like beer: malodorous . . .

 - 3'. If he opens [a well] in month Nisannu—[he will have trouble].
 - 4'. If (he opens it) in month Ayyaru—[grain will be lacking].
 - 5'. If (he opens it) in month Simanu—[he will acquire grain].
 - 6'. If (he opens it) in month Du'uzu—[the man's wife will die].
 - 7'. If (he opens it) in month Abu—[he will acquire servants].
 - 8'. If (he opens it) in month Ululu—[the man's son will die].
 - 9'. If (he opens it) in month Tašritu—[. . . will be fortunate].
 - 10'. If (he opens it) in month Araḥsamnu—[. . . of a servant].
 - 11'. If (he opens it) in month Kislīmu—[that man will be lacking].
 - 12'. If (he opens it) in month Tebētu—[end of (his) days].
 - 13'. If (he opens it) in month Šabatū—[honor].
 - 14'. If (he opens it) in month Addaru—[he will prevail over his adversary].
-

Reverse

1. If a man is building a well—[either the hand of a god or the hand of the king will affect that man].
2. If a man builds a well and is persistently confused—a son of the man's household will disperse his property].
3. If a man (re)builds an old well—[you set up 4 UR.GULA (figures made) of tamarisk at the 4 corners of the well; bury 7 grains of silver, half]
4. an ox hoof, oil, fine oil, [cedar] oil, [flour of bitter vetch and flour of cress, wherever there is a corner, then put down field-mouse dust, and he can build the well].

5. If a man builds a well with a measuring vessel—[you pickle in salt the right and left] eyes of a carp;
6. cover (them) in an unfired thin vessel; drop [4 grains of silver, a chip(?) of a basalt grindstone, an ox hoof],
7. honey and ghee inside it; [drop flour of bitter vetch and flour of cress] onto (it) [repeatedly, and that well will prosper].

8. [If a man] wishes to open a well in his house and when he has opened it—[in order that the evil of this not affect the man, when the well]
9. is dug and sunk down to its water, before [the wielding of the brick-mold or the forming of the baked brick . . . (MMA 86.11.356 breaks off at this point. Parts of the ritual and incantation that followed are preserved on other exemplars of Tablet 17.)]

Notes

Obverse

3'-14': These lines also occur as *Iqqur ēpuš* §43; see R. Labat, *Un Calendrier babylonien des travaux, des signes et des mois* (Paris, 1965), pp. 110–11.

Reverse

- 1: *i-pé-eš*: According to commentary the present tense indicates that the person habitually builds wells; perhaps he is a professional well-builder. See K.2895 (CT 41, 25:4) *hi-pí eš-šú PÚ i-pé-eš : šá PÚ^{meš} ma-da-ti dÙ(!)(copy: NI)^{meš}*, “(new break) is building a well = one who makes many wells.”
ŠU DINGIR: The “hand of” a god or king represented some sort of affliction.
- 3: <KÙ>.BABBAR is suggested by analogy with the following omen, although KÙ is missing on the only text that preserves this part of the ritual.
- 4: MUŠ₅ is broken in the duplicates but is restored by analogy with the following omen.
- 5: *ina DUG.NÍNDA*: In “Namburbi Texts V,” p. 152, R. Caplice comments, “The vessels, or sherds from them, were evidently used to line the well.” In “Ein verirrter Nineve-Text,” in F. Rochberg-Halton, ed., *Language, Literature and History: Philological and Historical Studies Presented to Erica Reiner*, AOS 67 (New Haven, 1987), p. 185, Kraus says, “*ina DUG.NÍNDA* kann ich schon deshalb nicht verstehen.”
- 6: mi nu qar ti: It is not clear how to read these signs, even though they are preserved on several exemplars of the text. For discussion, see S. M. Freedman, *If a City Is Set on a Height I*, Occasional Publications of the Samuel Noah Kramer Fund 17 (Philadelphia, 1998), pp. 258–59.

KÙ.BABBAR MI *nu-qar-ti* ^{na₄}HAR: The reading of these signs is offered as a possibility, following Kraus's suggestion that *nu-qar-ti* is to be read with ^{na₄}HAR, meaning "chip" or "fragment" of a millstone (p. 185). Kraus does not suggest a reading for the sign MI, but it might stand for the adjective *ṣalmu*, "black," or *tarku*, "dark," perhaps meaning tarnished.

- 8: Caplice, "Namburbi Texts V," p. 152, reads, "If a man opens a well in his house *anew or for the second time*." This translation does not take into account the change of tenses.

Nos. 40–41

Omens from Abnormal Births: *Šumma izbu*

Erle V. Leichty

The fragmentary texts MMA 86.11.383A (text No. 40) and MMA 86.11.383B (+) MMA 86.11.383F (+) MMA 86.11.383G (+) MMA 86.11.383H (text No. 41) are part of the ancient Mesopotamian divinatory corpus. The inhabitants of ancient Mesopotamia believed that the gods regularly revealed the future to mankind through the medium of omens, either fortuitously or in response to man's questions. Because of this, everything out of the ordinary was considered ominous and was to be taken seriously. Observed omens were systematically collected and recorded. Then the omens and their meanings were arranged by content so that the collections could be used for research to determine the meaning of new omens.

One of the ancient collections of Mesopotamian omens contains omens derived from abnormal births. The standard version of this collection was written on a “series” of twenty-four tablets and was known by two different names: *Šumma sinništu arātma*, “If a woman is pregnant, and,” and *Šumma izbu*, “If an anomaly.” The double name probably demonstrates the original existence of two separate series that were later combined into one. Tablets 1–4 comprise the series “If a woman is pregnant, and,” the name taken from the first line of Tablet 1, and contain omens taken from abnormal human births. Tablets 6–24 are named “If an anomaly” after the first line of Tablet 6 and contain omens taken from abnormal animal births. Either name could be used to refer to the complete series, but “If an anomaly” was more commonly used.

When the two original series, “If a woman is pregnant, and” and “If an anomaly,” were combined in the new enlarged series, the scribes added Tablet 5 between the two. The Metropolitan Museum of Art fragments come from an exemplar of this fifth tablet. Tablet 5 was reconstructed in 1970 (TCS 4) from four fragmentary copies from Nineveh and one from Sippar. To these we can now add eight new exemplars: four from Nineveh (K 6699, K 6889, K 15281, and BM 134518), one from Uruk (W 23270, von Weiher, *SpTU* 3, 91), one from Babylon (BM 34767), and the two fragments published here, which are probably also from Babylon. Two other sources, Emar 74161 (D. Arnaud, *Recherches au pays d'Aštata: Emar 6/pt. 2*, Editions Recherche sur les Civilisations 18 [Paris, 1985], pls. 411–12) and Rm 2, 181 (TCS 4, p. 199), probably also belong to this tablet but represent a different tradition in which the word *izbu*, “anomaly” is substituted for *nēšu*, “lion.”

The Nineveh/Sippar edition, as reconstructed in TCS 4, pp. 73–83, preserves 122 lines. The Babylon texts BM 34767 and the Metropolitan Museum fragments allow us to expand that edition by four lines. The Uruk edition is represented by a single complete tablet. It has ninety-six omens, generally, but not always, in the same order as the Nineveh edition. It also contains sixteen omens that are not in the Nineveh edition. These are scattered throughout the tablet. This Uruk version stops after omens that begin: “If a ewe gives birth to a lion,” while the Nineveh and Babylon editions continue with new topics.

The Babylon edition of this tablet, if indeed the Metropolitan Museum fragments are from Babylon, is different from both the Nineveh edition and the Uruk edition. The five Metropolitan Museum pieces appear to belong to the same tablet, although there are no direct joins. If they do, the order of the omens is radically different from that of the Nineveh edition. From the sequence of the Ninevite tradition the order of the omens on these fragments should

be: MMA 86.11.383A obv.; MMA 86.11.383B, F, G obv.; MMA 86.11.383A rev.; and MMA 86.11.383B, F, G rev. This would make it impossible for the two fragments (text Nos. 40 and 41) to have come from the same tablet, because of the colophon on fragments B, F, G, H. These two fragments probably date to the Seleucid period.

Many, but not all, of the omens on these two fragments are duplicated in the Nineveh or Uruk editions:

MMA 86.11.383A	obv. 2' = Nineveh 65; Uruk 10
	obv. 3' = Nineveh 66; Uruk 75
	obv. 4' = Nineveh and Uruk 5
	obv. 8' = Nineveh 92
MMA 86.11.383A	rev. 4' = Uruk 25
MMA 86.11.383B, F, G	obv. 1'-15' = Nineveh 99-114

The colophon on MMA 86.11.383B, F, G, H identifies it as Tablet 6 of the series *Šumma izbu*. This is inconsistent with all other editions of this series where these omens are recorded on Tablet 5. Thus the MMA text either offers a different tradition or has a scribal error.

The fragments published here contain omens derived from the birth of anomalous sheep. The omens on these fragments begin: "If a ewe gives birth to a lion" and go on to describe various anomalous features. Of course, this is not to be taken literally. The meaning must be that the lamb looks like a lion cub. After a series of such omens the text goes on with the lamb looking like various other animals and ends with a series of omens in which the ewe gives birth to various objects.

40.

MMA 86.11.383A

Šumma izbu, Tablet 5

Plate 56

Later 1st millennium, Babylon(?)

H. 60 mm W. 120 mm Th. 35 mm

Obverse

- 1'. [... x x x x . . .]
- 2'. [BE U₈ UR.MAH Ù].^rTU¹-<ma> SAG.DU NU GÁL NIN É EN [BA.UG₆ . . .]
- 3'. [BE U₈ UR.MAH] ^rÙ¹.TU-ma KA-šú up-pu-uq NIN [É EN BA.UG₆]
- 4'. [BE U₈ UR.MAH] Ù.TU-<ma IGI-šú 1> NUN šar-ru-tam ŠÚ-t[am DIB-bat]
- 5'. [BE U₈ UR.MAH] Ù.TU-ma SAG.DU-su SAG.DU AZ GAR NUN KI GIN [...]
- 6'. [BE U₈ IM].DUGUD^{mušen} Ù.TU MU.MEŠ BAL ši-ma-at ^d50 šá KUR-su ú-rap-i-¹šu-ú¹
- 7'. [BE U₈ GUD].^dUTU Ù.TU NUN KUR ka-la-šú ú-rap-pa-áš
- 8'. [BE U₈ UR].KU Ù.TU MU^{meš} ^dKASKAL×KUR BAL ^d50 šá KUR DAGAL-iš
- 9'. [BE U₈ X] Ù.TU DUMU KUR.KUR muš-te-šir NU TUK-ši
- 10'. [BE U₈ X Ù].TU MU^{meš} ^dKASKAL×KUR // BE U₈ BAL.GI ^rÙ.TU KUR¹-su DAGAL-iš
- 11'. [BE U₈ X Ù].TU KUR a-x [...]

Reverse

1'. [...] x x x [...] x x x x (x)

2'. [BE U₈ X Ù].TU KUR KI.KAL IGI-mar // BE U₈ ANŠE.KUR.<RA> Ù.TU šah-lu-uq-ti KUR LUGAL TUR-ir

- 3'. [BE U₈ x] Ù.TU NUN AŠ.TE È-ma *ina* KUR MAN-tam-ma DÚR-ab
 4'. [BE U₈ U]R.M[AH] Ù.TU-ma 5 SAG.DU^{meš}-šú 1 SAG.DU UR.MAH 1 SAG.DU UR 1 SAG.DU ŠAH 1 SAG.DU DÀRA
 5'. 1 SAG.DU [MÁŠ.DÀ] GAR *ina lib-bi* MU.BI ŠI.ŠI URU SÌG-aš NÍG.ŠU-šú SIG₅ KÚR TI-qí
 6'. BE U₈ GÌR Ù.TU KUR.BI *bi-rit bi-rit* DIB-bat // BE U₈ SIG₄ Ù.TU-«ma» KUR.BI *bi-rit bi-rit* DIB-bat
 7'. BE U₈ *si-li-tam* Ù.TU *bu-ul* KUR ZÁH LUGAL *dan-nu* *ina* KUR GÁL-ma KUR SIG-aš
 8'. BE U₈ *i-pí* Ù.TU KUR NUN ÚKU-in DINGIR^{meš} *ana* LUGAL *ina* GAN.BA ZÁH-tam x x x [...] .
 9'. BE U₈ *i-pí* Ù.[TU]-ma *si-li-tam* SAG.DU^{meš} *ina lib-bi-šú* [...]

Translation

Obverse

- 1'. [...] .
 2'. [If a ewe] gives birth to [a lion] and it has no head—the lady of the house of the owner [will die . . .].
 3'. [If a ewe] gives birth to [a lion] and its mouth is solid (i.e., has no opening)—the lady [of the house of the owner will die].
 4'. [If a ewe] gives birth to [a lion] and its eye is one—a prince [will seize] universal kingship.
 5'. [If a ewe] gives birth to [a lion] and its head is the head of a bear—the prince, wherever he goes, [...] .
 6'. [If a ewe] gives birth to an [A]nzû bird—years of reign, fate by Enlil who extended his land.
 7'. [If a ewe] gives birth to [the bull] of Šamaš—the prince will extend all of (his) land.
 8'. [If a ewe] gives birth to [a dog]—years of Illat, reign of Enlil, who extended the land.
 9'. [If a ewe] gives birth to [...]—the citizens of the lands will not have good guidance.
 10'. [If a ewe gives] birth to [...]—years of Illat. // If a ewe gives birth to a turtle—his land will expand.
 11'. [If a ewe gives] birth to [...]—the land [...]

Reverse

- 1'. [...] .
 2'. [If a ewe gives] birth to [...]—the land will experience hard times. // If a ewe gives birth to a horse—destruction; the land of the king will decrease.
 3'. [If a ewe] gives birth to [...]—the prince will leave the throne and will live in another country.
 4'. [If a ewe] gives birth to [a lion] and it has five heads, one head of a lion, one head of a dog, one head of a pig, one head of an ibex,
 5'. (and) one head of a [gazelle]—in that year the city will suffer a defeat; an enemy will take its valuable possessions.
 6'. If a ewe gives birth to a foot—(the people of) that land will fight one another. // If a ewe gives birth to a brick—(the people of) that land will fight one another.
 7'. If a ewe gives birth to afterbirth—the cattle of the land will be lost; there will be a strong king in the land, and he will weaken the land.
 8'. If a ewe gives birth to membrane—the land of the prince will become poor; the gods will (cause) losses in the market for the king.
 9'. If a ewe gives [birth] to membrane and the afterbirth has heads in it—[...]

41.

MMA 86.11.383B (+) MMA 86.11.383F

Šumma izbu, Tablet 5

(+) MMA 86.11.383G (+) MMA 86.11.383H

Plates 57, 58

Later 1st millennium, Babylon(?)

H. 35 mm W. 21 mm Th. 15 mm (MMA 86.11.383B)

H. 43 mm W. 41 mm Th. 24 mm (MMA 86.11.383F)

H. 51 mm W. 81 mm Th. 32 mm (MMA 86.11.383G)

H. 26 mm W. 30 mm Th. 12 mm (MMA 86.11.383H)

Obverse

- 1'. [BE U₈ DÀRA.MAŠ.DÀ] 'Ù.TU DUMU LUGAL¹ A[Š].TE AD-ŠÚ DIB-bat [KI.MIN ZI.GA SU.BIR₄^{ki} šá KUR ú-šal-pí-tu]
 - 2'. [BE U₈ DÀRA] Ù.TU DUMU LUGAL AŠ.TE AD-ŠÚ DIB-bat [KI.MIN RI.RI.GA NÍG.ÚR.LÍM.MA]
 - 3'. [BE U₈ SÚN] Ù.TU šá-ga-šá-a-tú ina KUR GÁL^{meš}-[ma la EN AŠ.TE AŠ.TE DIB-bat KI.MIN UŠ₄ KUR NIŠ-ni]
 - 4'. [BE U₈] AM Ù.TU pu-uh-pu-uh-^rhu¹-[ú ina KUR GÁL-ši]
 - 5'. [BE U₈] GUD Ù.TU NUN GIŠ.TUKUL[^{meš}-šú UGU GIŠ.TUKUL KÚR-šú ŠEŠ^{meš}]
 - 6'. [BE U₈] GUD Ù.TU-ma qá-^ran¹-ni GAR NUN ^rKUR KÚR¹-[šú ú-na-áš]
 - 7'. [^rBE U₈¹ GUD] '^rÙ.TU¹-ma [2] ^rKUN^{1meš}-šú BÀ-ut Iš-bi-^dÈr-[ra šá] ^rGABA.RI NU¹ [TUK-ší]
 - 8'. BE U₈ A[MAR Ù.TU LUGAL UG₆]-^rma LUGAL¹ MAN-ma ZI-ma SA₉ KUR ZÁH [// BE] ^rU₈ AS¹ Ù.TU šá [la KA-su
AŠ.TE DIB-bat]
 - 9'. BE U₈ A[MAR MAŠ.DÀ Ù.TU SÙH ina KUR] ^rGÁL¹-ma NU EN [AŠ].TE AŠ.TE DIB-[bat]
 - 10'. BE U₈ ANŠE [^rÙ.TU la i-du-ú] ^rAŠ.TE¹ [DIB-bat KI.MIN LUGAL KÚR KUR-su-ma ina] ^rKUR KÚR¹-šú UG₆ KUR.BI
bi-rit MIN^d[IM RA-^riš UŠ₄ KUR NIŠ-ni . . . ú zu . . .]
 - 11'. BE U₈ ANŠE [x Ù.TU . . . šá KUR EN-el] NUN GABA.RI NU TUK-ši
 - 12'. BE U₈ ANŠE.^rPAD¹.[DU Ù.TU . . . ^dIM] RA-[^riš]
 - 13'. BE U₈ ANŠE.[EDIN.NA Ù.TU . . . in-niš]-ši-ir-ma EGIR-šú x [. . .]
 - 14'. BE U₈ ANŠE.[MUL Ù.TU . . . NUN LUGAL]-tam [. . .]
 - 15'. BE U₈ ŠAH [^rÙ.TU . . .]
- (MMA 86.11.383H begins here)
(rest of obverse too fragmentary for transliteration)

Reverse

- 1'. [BE U₈ x] ^rÙ¹.TU x [. . .]
- 2'. [B]E U₈ 2 Ù.TU 1 UŠ 1 SAL [. . .]
- 3'. BAL SAL.KÚR^{meš} la mit-gur-ti ina KUR ^rGÁL¹ [. . .]
- 4'. ^rDUB¹.5(!).KAM ÉŠ.GÀR BE iz-[bu . . .]
- 5'. [. . .] ^rx gur x¹ [. . .]

Translation

Obverse

- 1'. [If a ewe gives birth to a doe—a son of the king] will seize the [th]rone of his father; [ditto (i.e., same protasis)—attack of Subartu who desecrated the land].

- 2'. [If a ewe] gives birth to an [ibex]—a son of the king will seize the throne of his father; [ditto (i.e., same protasis)—disease of the herd].
- 3'. [If a ewe] gives birth to a wild cow—there will be carnage in the land [and one who has no throne will seize the throne; ditto (i.e., same protasis)—the mood of the land will change].
- 4'. [If a ewe] gives birth to a wild bull—[there will be] quarreling [in the land].
- 5'. [If a ewe] gives birth to an ox—the weapon[s] of the prince [will prevail over the weapons of his enemy].
- 6'. [If a ewe] gives birth to an ox and it has horns—the prince [will weaken] the land of [his] enemy.
- 7'. [If a ewe] gives birth to [an ox and] it has [two] tails—omen of Išbi-Ir[ra who had] no rival.
- 8'. If a ewe [gives birth to a calf—the king will die] and another king will attack and destroy half the land. // [If] a ewe gives birth to a bear—a person [with no right to the throne will seize it].
- 9'. If a ewe [gives birth to a gazelle calf]—there will be [confusion in the land] and one who has no [th]rone will seize the throne.
- 10'. If a ewe [gives birth] to a donkey—[an outsider will seize] the throne; [ditto (i.e., same protasis)—an enemy will conquer the king and] he will die [in] the land of his enemy; (the people) of that land (will fight) one another; [bad weather; the mood of the land will change; . . .]
- 11'. If a ewe [gives birth] to an *agālu*-mule—[. . . omen . . . who ruled the land]; the prince will have no rival.
- 12'. If a ewe [gives birth] to a choi[ce] donkey—[. . .]; bad [weather].
- 13'. If a ewe [gives birth to an on]ager—[. . . will pr]osper and afterwards [. . .]
- 14'. If a ewe [gives birth to a m]ule—[the prince . . . king]ship [. . .]
- 15'. If a ewe [gives birth to] a pig [. . .]
(rest of obverse too fragmentary for translation)

Reverse

- 1'. [If a ewe] gives birth to [. . .]
- 2'. [I]f a ewe gives birth to two, one male (and) one female—[. . .]
- 3'. reign of enmity; there will be discord in the land; [. . .]
- 4'. Tablet five of the series Šumma iz[bu . . .]
- 5'. [. . .] . . . [. . .]

PART THREE

NOS. 42–44

LITERARY TEXTS

Nos. 42–43

Myths and Legends

Preface

W. G. Lambert

Little true literature has survived from Babylonian libraries as compared with cultic, magic, and other scholarly tablets. There are two obvious reasons for this. The first is that true literature had none of the practical benefit that, e.g., medical and magical texts were supposed to have. The second is that for most people in this society literature was heard rather than read, due to the general lack of literacy. Scribes were not the only guardians of traditional literature. The scribal factor must also be responsible for the seeming lack of new major literary compositions from the period after 1000 B.C. In the first millennium B.C. traditional texts such as Gilgamesh, Atra-hasis, and Etana continued to be copied, and some later copies are so scribally corrupted that it is clear that not much was understood. The devotion of scribes to tradition can explain the lack of interest in creating new major texts. It is certain that first-millennium B.C. cuneiform scribes included some of great learning, but either they did not trouble to compose new literary texts of any size or such texts when composed did not find favor with learned circles and so did not enter the stream of tradition. Another question is whether or not Aramaic, which was spreading as a spoken language over this period, was becoming a medium for literature. Since Aramaic texts were mostly written on perishable materials such as leather, parchment, and papyrus, they would not have survived, and so we cannot know the answer to this question.

No. 42

Atra-hasīs

W. G. Lambert

Introduction

The Babylonian Atra-hasīs epic begins with the gods alone inhabiting the universe, so that the junior gods had to toil on earth to supply necessary food. Eventually they wearied of this and went on strike, so that the senior gods arranged for the creation of the human race to take over the hard work of the universe, including all on earth. This new creation had the power to reproduce but was not subject to death, so that with the passage of time they multiplied, and their noise prevented Enlil, who lived on earth, from sleeping. He resolved to reduce their number, first by plague. But Ea, one of the gods who assisted in the creation of man, frustrated this plan, and as reproduction continued unimpeded, more noise was made, and Enlil lost more sleep. His second plan was to reduce the numbers of the

human race by famine—rain was withheld. But again Ea frustrated the plan and got rain sent. Next Enlil decided to wipe out humanity by a great flood (the prototype of the flood story in Genesis), and all the gods were bound by an oath to cooperate. However, cunning Ea found a way out and saved a group of humans in an ark, so that the gods had to decide the future of this group. Atra-hasis, the senior figure, and his wife were made immortal, while the human race as a species was allowed to continue. But death was apparently instituted (the actual word is broken off), and certain types of celibate female priesthood were established to keep the human population in check.

The best preserved edition is Old Babylonian, written in ca. 1640 B.C. Much less well preserved is the “Assyrian Recension,” known from copies of ca. 700 B.C. but perhaps going back in Assyria to the end of the second millennium, which shows signs of Assyrian editing. There are also Late Babylonian copies, presumably based on a lost Middle Babylonian recension: four tablets from Sippar, one damaged tablet from Babylon with an overlapping fragment, and the fragment published here (MMA 86.11.378A). This Middle Babylonian recension was clearly very different from the known Old Babylonian text and is important because the flood story in Tablet 11 of the Babylonian Gilgamesh Epic—the best-preserved Babylonian flood story—is presumably excerpted from the Middle Babylonian Atra-hasis, and it is probable, although not certain, that the account in Genesis ultimately depends on this same edition.¹

The well-known Old Babylonian recension consists of three tablets, of four columns each side, with totals of 416, 439, and 390 lines, respectively. The Assyrian Recension apparently consisted of two tablets only, of three long columns each side. In late Assyria there were also circulation editions more like the Old Babylonian recension, although only small fragments survive. They demonstrate that there was no standard Late Assyrian edition of this text even in format, as there was for most major literary texts in the first millennium. The Late Babylonian Sippar tablets have one column per side, of about 115–120 lines each, while the Babylon tablet has two columns on each side, with not less than fifty lines, perhaps many more, in each column. Again, there was no standard edition. The fragment published here, which does not overlap with any other Late Babylonian tablet, is from the top left-hand corner of its tablet and so supplies the beginning and end of the text written on that tablet. The first three lines are either totally missing or so damaged as to be useless, but the beginnings of ll. 4–11 are clear. These are from the episode when Enlil for the first time set in motion a plan to decimate the human race, by disease. They correspond to Tablet 1, ll. 359–63 of the Old Babylonian text but are more closely related to the Assyrian Recension, Tablet 1, col. iv 8–13. When turning from obverse to reverse on this tablet one is immediately struck by the difference in size of the script. Four lines on the reverse occupy the space vertically of three lines on the obverse, and, more importantly, the columns are narrower. From the fully or almost fully preserved ll. 12–13 and 23 of the reverse, the column width of about 46 mm can be ascertained. Calculation is harder on the obverse, since only the beginnings remain and the surviving parallel lines do not finally settle what is missing. If l. 4 is restored from either Old Babylonian Tablet 1, l. 359 or from the Assyrian Recension Tablet 1, col. iv 3, it had originally thirteen signs, of which the five remaining occupy 26 mm across the column. This would suggest that the complete line was not less than 68 mm long, because scribes might leave a space in a poetic line across the tablet, and if so it is usually in the latter part of the line. Thus two columns of this size on the obverse would take up not less than 138 mm, exactly what three columns of the narrower type would take up on the reverse. The thickness of the tablet renders it unlikely that three columns of the width of that on the obverse were contained on it. So the evidence quoted strongly argues that there were two wide columns with bigger script on the obverse and three narrower columns with smaller script on the reverse.

Such an arrangement is of course very erratic by good scribal standards, but the actual signs preserved suggest a good-quality scribe, not a student or a hack. A glance at the beginning and end of the tablet in relation to the story suggests the explanation. The first preserved line, 4, is located close after the point where the narrative tells how the human race multiplied for the first time and annoyed Enlil. This would have been a rational place to begin a new

tablet were this a well-planned edition. However, the three missing lines are too few for even the shortest known version; five is the minimum. So probably the tablet began with Enlil's speaking up; cf. Old Babylonian Tablet 1, l. 356. This fragment ends with the flood-hero being made immortal, the last episode in the story, and this explains the cramping on the reverse: the scribe resolved halfway through the tablet to fit the rest of the text on the reverse, but it is not clear that he succeeded. Unfortunately the last four lines are very badly preserved, and one or two more might have followed when the tablet was complete. The last preserved line is in the middle of the upper edge of the tablet. The rites of making the flood-hero immortal occupy the last few adequately preserved lines (21–23), and it is hard to believe that the epic ended after some half-dozen more lines. Ea has reproved Enlil for bringing the flood and argued that the human race must continue forever. Then Enlil bestowed immortality on the flood-hero. He must surely reply after this to Ea, accepting the continuance of mankind, but with qualifications, at least imposing death to offset birth even if the Old Babylonian orders of celibate female priesthood were omitted because they no longer existed in the Middle Babylonian period. And there must have been some sort of epilogue, if only very brief. On these grounds we may doubt whether or not the scribe succeeded in completing his text on this tablet.

Thus all the facts about this tablet suggest that the scribe was copying from originals he did not acknowledge as a standard edition for format, and was doing so for the first time. This agrees with the Late Assyrian evidence of the lack of a standard format and edition of this epic in the first millennium B.C. The number of recovered pieces and the percentage of the whole text they represent, compared with similar facts for *Enūma Elish*, *Gilgamesh*, and *Erra*, suggest that *Atra-hasīs* was little appreciated in the first millennium.

The excellence of the scribal hand suggests a date within either the Neo-Babylonian empire or the earlier part of the Persian empire. This tablet is quite unlike the crude writing and corrupt texts found in many Seleucid and Parthian copies of Babylonian literary texts.

1. See further, W. G. Lambert, "Babylonien und Israel," *Theologische Realenzyklopädie* 5 (1979), pp. 67–79.

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idem, "New Evidence for the First Line of *Atra-hasīs*," *OrNS* 38 (1969), pp. 533–38

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See also D. Shehata, *Annotierte Bibliographie zum altbabylonischen Atramhasīs—Mythos Inūma ilū awilum*, Göttinger Arbeitshefte zur altorientalischen Literatur 3 (Göttingen, 2001).

42.

MMA 86.11.378A

Plates 59, 60

H. 65 mm W. 56 mm Th. 24 mm

Atra-hasīs

Neo-Babylonian/Achaemenid period

Obverse

Column i

(beginning of obverse broken; two lines missing)

3. x x x [. . .]
4. *iḥ-hu-bu-ri-š[i-na . . .]*
5. *qí-ba-a-ma [šu-ru-up-pu-ú li-ib-ši]*
6. *li-še-eḥ-ḥ[i-ir ri-gim-ši-na ^dNam-tar-ru]*
7. *ki-ma me-he-e [li-zi-qa-ši-na-ti-ma]*
8. *mur-ṣu šu-[ru-up-pu-ú . . .]*
9. *^dNam-tar-ru [. . .]*
10. *li-ib-l[i . . .]*
11. *iq-bu-́u¹-[ma . . .]*

Reverse

Column v

1. x [. . .]
2. *a[t-ta apkal ilāni^{meš} qu-ra-du]*
3. *k[i-i-ki-i la tam-ta-lik-ma a-bu-ba taš-kun]*
4. *ku-u[m taš-ku-nu a-bu-ba . . .]*
5. *KI+MIN ^d[Èr-ra lit-ba-am-ma nišī^{meš} . . .]*
6. *KI+MIN su-́un-qu¹ [liš-šá-kin-ma māta liš-giš]*
7. *KI+MIN nēšu(ur.mah) u barbaru(ur.bar.ra) [lit-ba-am-ma nišī^{meš} li-še-eḥ-ḥi-ir]*
8. *KI+MIN pa-šuq-ti ṣa-la-́a¹ [. . . .] x [. . .]*
9. *ma-ta-a-ti x [. . . . nišī]i^{meš} lu [x x]*
10. *dan-na x [. . .] lib-[x]*
11. *be-el š[e-er-ti] ́e¹-mid še-ret-s[u]*
12. *be-el [gíl-la-t]i e-mid gíl-lat-s[u]*
13. *iš-tu ́u₄¹-[mi-im-m]a a-a iš-šá-kun a-bu-bu*
14. *ù nišū^m[eš] lu-ú] da-ra-a da-riš*

15. *i-lam-ma [^dEn-l]íl a-na lib-bi gi[š]elippi]*
16. *iš-bat qa-ta [u]l-te-la-an-ni ul-́tu¹ lib-bi g[íš]elippi]*
17. *at-t[a-m]a ¹Zi-sù-ud-ra lu-ú ut-napištim^{im} [šùm-ka]*
18. *m[ār-ka ašš]at-ka u mārat-ka ta-KAL-ti lib-bi x [x x]*
19. *[lu]-́u¹ šu-mat-ma it-ti ilāni ba-la-tu x [x (x)]*
20. *[l]i-iz-ziz-ma sinništū ina pu-ti-i[a]*
21. *[i]l-pu-ut pu-ta u pu-us-s[a]*
22. *[i-n]a bi-ri ^dA-nim u An-tu[m]*
23. *[i-na b]i-ri ^dEn-líl u ^dNin-líl*
24. *[. . . .] x x (x) [x] x x x -ni-šu(?) [(x)]*

Under Edge

25. . . .] x ^{d(?)}*En*(?)-[*lil*(?)]
 26. . . .] x *ši-bu-t*[*u*]
 27. . . . *i*]a-[x]

Translation

Obverse

Column i

- 1–3. [“...
 4. Through their hubbub [...
 5. Command [that there be plague].
 6. Let [Namtar] diminish [their noise].
 7. [Let] disease, plague [and ...
 8. [Blow upon them] like a tornado.
 9. Namtar [...
 10. May it come to an end [...]”
 11. They commanded [and ...

Reverse

Column v

1. [...
 2. “You, [the sage of the gods, the warrior],
 3. how [did you bring about a flood without forethought]?
 4. Instead [of bringing about a flood, ...
 5. Instead of bringing about a flood, [Erra should have arisen and ... the people].
 6. Instead of bringing about a flood, [famine should have been brought about to destroy the land].
 7. Instead of bringing about a flood, lions and wolves [should have appeared and diminished the people].
 8. Instead of bringing about a flood, distress ... [.....].[...]
 9. The lands . [....] may the people [...]
 10. The strong . [...] . [...] .
 11. Impose the penalty on the guilty.
 12. Impose the crime on the criminal.
 13. Henceforth let no flood be brought about,
 14. but let the people last forever.”
-
15. Enlil went up into the [ship].
 16. He took my hand and led me from the ship:
 17. “You are Zisudra, let [your name] be Ut-napištim.
 18. [Your] son, your wife, your daughter,[.]

19. You will become like a god; [you will receive] life.
20. Let the lady stand opposite me."
21. He touched my brow and her brow.
22. Between Anu and Antu,
23. between Enlil and Ninlil,
24. [...]

Under Edge

- 25–27. (too fragmentary for translation)

Notes

Obverse

Cf. W. G. Lambert and A. R. Millard, *Atra-hasis: The Babylonian Story of the Flood* (Oxford, 1969), p. 66, ll. 359ff. and p. 106, ll. 8ff.

Reverse

Cf. *ibid.*, p. 100, ll. 18ff., and Gilg. Tablet 11, ll. 181–205. The latter is closer to this new Late Babylonian Atra-hasis, and while the Old Babylonian Atra-hasis continues with Enlil's instructions to Ea to prevent a further population explosion, Gilgameš continues, as here, with the flood-hero's apotheosis.

- 4: *kūm*, which replaces *ammaki* of Gilgameš Tablet 11, occurs as a conjunction only in late dialects.
- 8: A restoration *sa-la-a-[ti]*, "strife," is possible.
- 10: Perhaps restore *lib-[lūt]*.
- 14: *iš-šá-kun* is presumably an error mixing *iškun* and *iššakin*.
- 17: Changes of name at significant points in the narrative are characteristic of Sumero-Babylonian myths and epics. In Lugal-e (van Dijk, ed., *Lugale*) Ninmah is renamed Ninhursag by Ninurta after he has defeated Asakku and formed the *hursag* (ll. 391–96). In Atra-hasis Tablet 1, ll. 246–47, Mammi is renamed Bēlet-(kāla)-ilī when she arranges that the gods be freed from toil. In *Enūma Eliš* Tablet 5, ll. 109–11, Marduk, on being hailed as king of the gods, is named Lugaldimmerankī'a. In the context under discussion the flood-hero's normal Sumerian name is replaced by his normal Akkadian name. The former probably means "He whose life has been made long," and the latter is clearly based on *atū*, "find," and *napištu*, "life," but the grammar has not hitherto been adequately explained. The only Old Babylonian writing, B. Meissner, *Ein altbabylonisches Fragment des Gilgames-epos*, Mitteilungen der Vorderasiatischen Gesellschaft 7 (Berlin, 1902), col. iv l. 6: *ú-ta-na-iš-tim*, is no doubt an error for *na-pí-iš-tim*. Middle and late writings use *ut* for the first element and various alternative genitives of *napištu* for the second element (see *CAD A/2*, p. 521 s.v. *atū*). The name is clearly derived from the Old Akkadian name type *ú-tá-be-lí* (BIN 8, 142:22), "I will find my lord"; cf. also *ú-tá-a-bi-i*(?) (I. J. Gelb, *Glossary of Old Akkadian*, Materials for the Assyrian Dictionary 3 [Chicago, 1957], p. 82); *ú-tá-ah* (I. J. Gelb, *Sargonic Texts from the Diyala Region*, Materials for the Assyrian Dictionary 1 [Chicago, 1961], p. 163 col. ii 8); *ú-ta-a-bi*, *ú-ta-a-hi* (de Genouillac, *Kich* 2, p. 56 A 463 bis); and *ut-tá-maš.tab* (YBT 14, 75:12), "I will find my father/a brother/my father/my brother/a twin." Thus one must read the sole Old Babylonian writing as *ú-ta-na-⟨pí⟩-iš-ni*, "I will find my life," although the

value *tī* is not hitherto found in the Old Babylonian period. The late abbreviation of *utta* to *ut* suggests that the original construction was forgotten and the form *utta* was taken as a nominal form, which, like *bān* from *bānī*, was abbreviated, and so the following noun, originally *napištī*, was misconstrued as a genitive.

- 18: The sign is a clear KAL, but *takālti*, “container,” gives no sense in the context. The sign could be a variant form of, or an error for, DIR, since *adirti libbi* is an attested phrase. Since the flood-hero wept over the destruction brought by the flood (Gilgameš Tablet 11, ll. 138–39), perhaps this line is meant to console him in that the human race would be continued through his family.
- 19: *emū/šūmū* is normally construed with *iš* or *kīma/kī*, rarely with *ana*. One could add *itti* to this list on the basis of this passage, but there is a possibility that a phonetic sign KI at some point in the transmission was misunderstood and rendered as *itti*.
- 21: This ceremony was no doubt based on a custom in human society, perhaps the Old Babylonian rite of freeing a slave. The phrase (*pūssu*) *ullil* is used in Old Babylonian documents (VAB 5, p. 43, cf. CAD E, p. 82 s.v. *elēlu*), and could be derived from the owner’s placing his hand on the slave’s forehead.

No. 43

Fragment of Lugal-e

Stefan M. Maul

Introduction

Only the upper edge, which is almost complete, and the first four lines are preserved in the small fragment MMA 86.11.459. It contains a part of the Ninurta myth Lugal-e, i.e., l. 311 from the seventh tablet of the myth,¹ which is part of a speech made by the divine weapon Šar²ur addressed to its master, Ninurta. We find for the first time in this text an Akkadian translation to l. 311, although it is very fragmentary.

MMA 86.11.459 does not belong to a fragment² of the Lugal-e myth that arrived in the Berlin Museum together with the tablets published in *SBH* (a comparison of the two fragments proves this). However, the sign-forms clearly show that this tablet was also written during the Seleucid-Parthian period.

Unfortunately, the original size of this tablet cannot be determined. The fragment might be interpreted as a school text that contained an excerpt of Tablet 7 of the myth Lugal-e on the obverse.³ The few traces on the reverse cannot be deciphered. They seem to be a Sumerian line rather than a colophon.

1. According to count by J. J. A van Dijk; see van Dijk, *Lugale* 2, p. 95.

2. *SBH* 71 = Lugal-e, Tablet 8, ll. 345–71.

3. We cannot exclude the possibility that the fragment MMA 86.11.459 may be a fragment of a commentary to Lugal-e. (For Lugal-e commentaries see I. L. Finkel, “On the Lugale Commentaries,” *RA* 80 [1986], pp. 190–91.)

43.

MMA 86.11.459

Plate 61

H. 27 mm W. 54 mm Th. 16 mm

Fragment of Lugal-e, Tablet 7
Seleucid or Arsacid period

Obverse

1. [lu]gal-mu zà-zu ba-ra-an-ga-ti
 2. ba-ra-an-ga-tuš ba-ra-an-'ga¹-[ù-tu]
 3. be-lu ul-la-'nu¹-u[k(?)-ka . . .
 4. u[l-la-nu-uk-ka . . .
- (rest of obverse broken)

Reverse

- (beginning of reverse broken)
- 1'. x [. . .
 - 2'. še en GAR še(?) 'en¹ x [. . .

Translation

Obverse

- 1,3. My lord, beside you no other lives,
- 2,4. no other resides, no other has been b[orn].
5. [Ninurta, from now on there is nobody in the mountains who rises up against you.]

Reverse

(too fragmentary for translation)

Historical Literature

No. 44

Letter of Sîn-šarra-iškun to Nabopolassar

W. G. Lambert

Introduction

Ten fragments of this one-column-a-side tablet (MMA 86.11.370A+) survive, of which nine join to provide a complete sequence of thirty lines of text, one of rubric, and two of colophon. The loose piece can be placed as part of the upper edge. What remains of the colophon, compared with others more complete, suggests that the tablet was written in the middle of the second century B.C. Babylon was the place of writing. The immediately preceding rubric explains that this text is a letter of Sîn-šarra-iškun to Nabopolassar, “his lord.” In view of the little known about the fall of the Assyrian empire, this would be a major historical source were it better preserved. Only two lines can be fully restored and understood. For the greater part only isolated phrases remain.

The first question is whether or not this is a genuine letter as it claims to be. With so little consecutive text a sure answer cannot be given. What survives is literary in tone and Babylonian rather than Assyrian linguistically. But the best Late Assyrian scribes were fully capable of high literary Babylonian composition, and an Assyrian king who had in effect lost his independence to Babylon might well have chosen to assert his cultural equality by using a scribe who would have been a status symbol even in Babylon. The survival of the letter in the scribal tradition is noteworthy. Royal correspondence of the last king of the Third Dynasty of Ur did enter the scribal corpus of the Old Babylonian period, but only on occasion. Apocryphal letters did exist within the scribal corpus; that of Gilgamesh to an unknown king (O. R. Gurney, “The Sultantepe Tablets (continued).VI. A Letter of Gilgamesh,” *AnSt* 7 [1979], pp. 127–35) and that of Adapa to Alulu (an antediluvian king) in *STT* 2 176:14–21 are the best known. However, these Babylonian letters foisted on Sumerian characters of great antiquity are no parallel to a letter of a well-known historical king of Assyria in the later seventh century. According to the colophon our tablet was copied from one “found in Esagil,” but we do not know if that was the original letter or a copy. If our text is a genuine document, obviously it would have been sent first to the royal palace. But big temple libraries existed at the time, and so the temple might well have acquired the original or a copy for its library.

To assess the plausibility of the content, what little is known of the reign of Sîn-šarra-iškun must be sketched. For sources see the reports of R. Borger, “Der Aufstieg des neubabylonischen Reiches,” in *JCS* 19 (1965), pp. 67–71; J. Oates, “Assyrian Chronology, 631–612 B.C.,” *Iraq* 27 (1965), pp. 136–37; and the additional discussions listed in J. A. Brinkman, *Prelude to Empire*, Occasional Publications of the Babylonian Fund 7 (Philadelphia, 1984), p. 109 n. 548. As his own inscriptions report, Sîn-šarra-iškun was a son of Ashurbanipal. According to Berossus he appointed Nabopolassar as “general” (Greek: *stratēgos*; “Heerführer” from Abydenos, in Eusebius’s Armenian Chronicle).¹ So obviously Nabopolassar had military talent, which explains his later successes against the Assyrian armies. The king list from Uruk makes Sîn-šarra-iškun and Sîn-šumu-lišir kings of Babylon for one year between Kandalānu and Nabopolassar, the year given as kingless in the Babylonian Chronicle. Presumably there was no king of Babylon *de jure*, but both these men were in control of at least some of Babylonia for part of that year. The same Chronicle reports

that in this very year Sîn-šarra-iškun withdrew to Assyria, although the Assyrian army in fact remained, and for some six years part of Babylonia at least, particularly Nippur, acknowledged him as king of Assyria and their king. The last thing known about Sîn-šarra-iškun also occurs in the Babylonian Chronicle, in which, in Nabopolassar's fourteenth year (612 B.C.), he is named king of Assyria at the fall of Nineveh. The simplest explanation of the facts just given is that on Ashurbanipal's death Sîn-šarra-iškun became king of Assyria and remained so until the fall of Nineveh. The problem is that another son of Ashurbanipal, Aššur-etel-ilāni, also ruled Assyria for a time after his father's death and was also acknowledged as king in parts of Babylonia for at least four years. So far no generally accepted solution of these problems has been proposed, and this is not the place to enter into detailed consideration of the facts. The Babylonian Chronicle tells of hostilities between Assyria and Nabopolassar from his accession to his third year. After that the text breaks off until his tenth year, when it resumes and is preserved to the time beyond the fall of Nineveh. Up to the third year in the Chronicle, and until the seventh in dates on documents, the struggle between Assyria and Babylonia takes place in Babylonia. Then from the tenth year, where information resumes, Nabopolassar marches out of his home country to fight the Assyrians in central and north Mesopotamia. Thus by at least the tenth year the Assyrians were finally ousted from Babylonia.

The historical problem of this letter of Sîn-šarra-iškun is that while he is called "king of Assyria" in the rubric (presumably firmly based on the whole letter, of which we have only damaged parts), he frequently addresses Nabopolassar as "the king, my lord," as though he were a subject king. As far as our knowledge goes, such a state of affairs never existed. For the whole of his reign Sîn-šarra-iškun resisted Nabopolassar. One solution would be to declare the letter fiction, the product of a Babylonian writer concerned with rewriting history for the greater glory of Babylon. Before this view is adopted, every other possibility should be tried. One might be tempted to suppose that as soon as the Assyrians were finally driven out of Babylonia, Sîn-šarra-iškun in effect sued for terms from his former general. This would have taken place in the eighth or ninth year, for which we have no other evidence. The difficulty in this supposition is that under the circumstances one would expect Sîn-šarra-iškun to adopt the stance of an equal, not of a subordinate. The "great king" of Assyria would be inviting the king of Babylon to bury the hatchet and become a friend. Also, the loss of Babylonia would not then have been seen as the prelude to the fall of Assyria. However, when in 615 B.C. Nabopolassar defeated the Assyrian army at Takritain on the middle Tigris, and when in the next year, 614, Ashur fell to the Medes, whereupon Medes and Babylonians formed an alliance, Sîn-šarra-iškun must have seen the writing on the wall. What remains of the Metropolitan Museum letter fits very well with the idea that it is a genuine letter, clearly part of a larger correspondence that the two kings conducted between the making of the Medo-Babylonian alliance and the fatal siege of Nineveh in 612 B.C.

Seeing that events were fast moving against him, Sîn-šarra-iškun apparently tried to find a diplomatic way out of his difficulties. He had known Nabopolassar personally some fifteen years earlier, so he could well have considered the possibility that he would be able to reason with him. The aim was for Sîn-šarra-iškun to offer his submission to Nabopolassar while keeping his own throne and at the same time to separate the Babylonians from the Medes. The traditional enmity between Babylon, Assyria, and Elam may have given hope that Media could be regarded as the spiritual heir of Elam.

The first three lines are apparently the address to Nabopolassar, ending with "the king, my lord" (with *ma* appended to mark the end). The first two epithets, "governor of Babylon, mighty king," are traditional Babylonian, but the phrase "with [full] discretion to act" is apparently unique and was probably used to start the process of admitting that Nabopolassar had the upper hand. The following statement, that Marduk commissioned Nabopolassar to "avenge Akkad," is a further admission that Assyria, which had dominated Babylonia for a century or two, was no

longer doing so, thanks to Nabopolassar. In ll. 4–7 first the gods of Babylon and secondly the state god of Assyria (name restored in l. 6 but certain from the following phrase, “who dwells in Ešarra”) are invoked. It would be standard at this point in a letter to ask for blessings on the recipient, so we presume that precative verbs are to be restored. Apparently Sîn-šarra-iškun hopes that “all the kings” in an area of West Iran will do something (perhaps submit?) to the recipient. The first place named is complete but cannot be identified, but the last, Parašû,² is known to have been a place beyond Elam from a Mesopotamian perspective. Perhaps this area was the home of the Medes at this time and Sîn-šarra-iškun was hoping that with divine help the Medes would become subjects of Babylon instead of allies. The god Ashur is apparently asked to ensure that Nabopolassar’s wishes be gratified (ll. 6–7).

This interpretation of ll. 1–7 leaves one major problem. The sender is apparently not named or alluded to. The letter might well have begun “Letter of Sîn-šarra-iškun, king of Assyria, to . . .,” just as the rubric reads, but there is no room in l. 1 to restore both kings’ names with even the briefest titles. Perhaps the scribe who copied the letter on a tablet with library conventions of rubric and colophon decided that naming the sender in the rubric allowed him to delete it from the letter.

Lines 8 and 14 both allude to previous correspondence. In l. 8 it appears that the sender of the letter is a king challenging another king to defend himself or have his land overwhelmed. The context reveals that Nabopolassar is most likely threatening Sîn-šarra-iškun, and the mention of the Ishtar Gate (in Babylon) in l. 9 may allude to a victory procession on the successful completion of the campaign. But by the end of l. 9 Sîn-šarra-iškun is speaking again, probably in reply. Line 14 clearly cites a letter of Sîn-šarra-iškun to Nabopolassar, but it is very difficult to catch the drift of ll. 10–18. In l. 10 who is the partridge and who the falcon? Perhaps the Medes are the falcon and the Babylonians the partridge, or perhaps Sîn-šarra-iškun is the partridge and Nabopolassar the falcon. However, the mention of “consultation” and “reconciliation” in ll. 19–20 suggests that the Assyrian king is asking for negotiations instead of threats, and l. 27 similarly hopes that someone, presumably Nabopolassar, will be appeased. Then in l. 28 Sîn-šarra-iškun offers to present himself bearing certain things to Nabopolassar. In ll. 29–30 the king of Assyria seems to offer his apologies for not performing some vaguely expressed duties toward the king of Babylon, and he concludes by inviting Nabopolassar to reply in whatever vein he chooses.

Thus based on our present knowledge it is possible to take this letter as a genuine letter of Sîn-šarra-iškun, a part of a larger correspondence in which the king of Assyria offers his submission to Nabopolassar while trying to extract some concessions, and to detach him from his Median allies. If this is the correct interpretation, Nabopolassar kept the correspondence going while in no way changing his course of action.

Confirmation for this interpretation of the document comes from the tablet BM 55467 (82–7–4, 40), published by Pamela Gerardi, “Declaring War in Mesopotamia,” *AfO* 33 (1986), pp. 30–38. It is a Late Babylonian tablet of similar shape to the one under comment here and is in a similar hand. It is believed to have come from Babylon. As preserved, it has twenty-eight lines with five overruns. Probably something of every line of the complete tablet is preserved, since part of the bottom edge and a little of the right-hand edge survive, and although nothing of the upper and left-hand edges remains, the shape of the tablet suggests that very little is missing at the top and left side. It is an address in literary Babylonian from a Babylonian who is threatening the king of Assyria with war. The sender can be identified with Nabopolassar, since he refers to himself as having been chosen by Marduk “from the land of the lower sea” ([*ul*]-*tu qí-rib māt ti-amti šap-li-tum*: obv. 10) to avenge Akkad and Babylon. As noted above, Nabopolassar came to prominence in the Sealand as a general fighting for the Assyrians. The basis for this “avenging of Akkad” is spelled out in detail. The Assyrians under Sennacherib had plundered Babylon, including Marduk’s temple Esagil, and committed atrocities. The name of the Assyrian king so addressed is not preserved, and there seems to be no

room for a formal titulary introduction at the beginning, unless one whole line is missing there.³ The end of the inscription is unclear due to damage: it could be the end of the letter but need not be. Thus the possibility has to be acknowledged that BM 55467 may be an extract from the letter, not the complete text. From obv. 18 it is certain that this is from an exchange of letters:

*tup-pu áš-pur-kam-ma la t[u]-x-x-[x]
I wrote a letter to you, but you did not . . [.]*

This is therefore a second letter of Nabopolassar to the Assyrian king, and the conditions under which it is claimed to have been written are stated in obv. 14–15:

*(^damar.utu) [a-n]a bē-lu-tu mātāti (kur.kur) il-qa-an-ni-ma niš^{mēš} mātāti(kur.kur)^{mēš}
kul-lat-ši-na ú-šat-m[i-iḥ] qa-tu-ú-[a]
(Marduk) has taken me to be lord over the lands and has given the peoples of all the lands into my hands.*

This fits very well the time when Nabopolassar had the upper hand over Assyria and could afford to make threats. The tablet edited here could well be the reply to the letter BM 55467 published by Gerardi. In that letter Nabopolassar had glossed over the fact that the Medes had done much to assist in his success, so in his reply Sīn-šarra-iškun gently alludes to this aspect of the situation and tries to persuade Nabopolassar to give up his dependence on the Medes and instead to ally himself with Assyria. Further speculation has no point without more complete documents, but it seems reasonably certain that BM 55467 is part of the same correspondence as MMA 86.11.370A+. Gerardi proposed that it was a formal declaration of war. We consider it rather as part of a diplomatic exchange but not formally a declaration of war.

There are a few Late Babylonian orthographies, e.g., *kalla* in l. 5 and the *aleph*-signs in l. 24, but such things are to be expected in any Late Babylonian literary copy, whatever its origin. In view of the great historical importance of this document and its damaged state this writer has departed from usual conventions by not putting some possible restorations in the text but instead giving them in the Notes. Restorations have been put in the translation with question marks, because historians lacking cuneiform will be interested to see them.

1. D. J. Wiseman, *Chronicles of Chaldean Kings (626–556 B.C.) in the British Museum* (London, 1956), p. 6 stated: “Berossus says that Sīn-šar-iškun had appointed Nabopolassar as administrator of the sea-land,” referring to P. Schnabel, *Berossus und die babylonisch-hellenistische Literatur* (Leipzig-Berlin, 1923), p. 271. Note also J. Oates: “According to Berossus, he appointed Nabopolassar administrator of the Sealand, which must have been before Nabopolassar came to the throne in 626. Eusebius, *Chron. I, 35*” (“Assyrian Chronology, 631–612 B.C.”) *Iraq* 27 (1965), p. 136; and J. E. Reade, “The Accession of Sīnsharishkun,” *JCS* 23 (1970), p. 4, “Nabopolassar, as king of the marshland. . . .” Polyhistor, as retold by Syncellus, states: “He (Nabopalasatos) was sent as general by Sarax, king of the Chaldeans, and campaigned against the same Sarax toward Nineveh” (Jacoby, *FGH* III C, p. 387). Abydenos excerpted by Eusebius states: “After him Sarakos reigned over the Assyrians. When he learned that an army of sundry groups was coming up from the sea against him, he promptly sent Busalossoros as general to Babylon” (J. B. Aucher, *Eusebii Pamphili Caesariensis Episcopi Chronicon bipartitum, nunc primum ex Armeniaco textu in Latinum conversum adnotationibus auctum Graecis fragmentis exornatum opera P. 1* (Venice, 1818), p. 27; Jacoby, *FGH* III C, p. 404. A literal translation of the key phrase kindly made at this writer’s request by J. N. Birdsall is: “When he knew that a force, a mixed people, from the sea were beginning to move (scil. toward, or, against him).” Thus Nabopolassar was appointed a general by Sīn-šarra-iškun, not a governor of the Sealand. Who this mixture of people coming from the sea (Persian Gulf?) were is not clear.

2. For the location of this country, at least in earlier times, see P. Steinkeller, “The Question of Marhaši: A Contribution to the Historical Geography of Iran in the Third Millennium B.C.,” *ZA* 72 (1982), pp. 237–65. The first place named is of uncertain reading

and is apparently known only in lists of place-names. First, in an Old Babylonian forerunner to Urra XXI: KUR Ši-rum^{ki} (C-F. Jean, "Vocabulaire du Louvre AO 6447," RA 32 [1935], p. 170 col. iv 4 = MSL 11, p. 131); then in a Ras Shamra list: ma.da Ši-rum^{ki} = si(?)-li(?); ma.da Ši-rum^{ki} = i-te-ni (MSL 11, p. 43 col. i 13'-14'); in a Late Assyrian list from Aššur (KAV 80:8-10):

[KUR Ši-r]um^{ki} = i-[x x]
 [KUR Ši-r]um^{ki} = a-x [x]
 [KUR Ši-r]um^{ki} = a-[x x]

and finally in Urra XXI(?) (BM 40739 = MSL 11, p. 15 section 4 41-43)

KUR Ši-rum^{ki} = . . .
 KUR Ši-rum^{ki} = . . .
 KUR Ši-rum^{ki} = [. . .]

In both the Ras Shamra and the Aššur lists, Parašū immediately precedes the lines quoted, so this would seem to confirm that "Širum" is correct and is the same place in the context under discussion. In the other two lists Elam occurs in the same context, which offers further confirmation. However, the problems are not solved. While the pronunciation Ši-rum is deduced from the following Ši-rum, it is uncertain. And if Širum is the right pronunciation, it seems Semitic, but the above lists offer quite different names (so far as preserved) in the "Babylonian" sub-column. The sign following in our letter is not KI, and in any case the space between it and ad*j* requires at least one more name, so that the text would read: "From A and B to C."

3. The tablet has been collated and the results used here. The remainder of the first line of the obverse reads: [x x] ti 'ku(?) lu haq-tu a/za¹ [. . .].

44.

MMA 86.11.370A + MMA 86.11.370C +

Letter of Sîn-šarra-iškun to Nabopolassar

MMA 86.11.383C + MMA 86.11.383D

+ MMA 86.11.383E

Plates 62, 63

2nd century B.C., Babylon

H. 100 mm W. 152 mm Th. 36 mm

Obverse

1. [ana ^{1d}Nabû-apla-ušur] šakkanak(GÌR.NÍTA) Bâbili(E)^{ki} šarru dan-nu ma-ṣ[i ma-la li]b-bu-šú šá ^dMard[u]k apkal šamê^e u erisetim^{tim}
2. [x x x x ú]-ma²-ir-šu-ma tur-ru gi-[mil-li māt] Akkadî^{ki} ú-mál-l[a]-a qa-tuš-šú
3. [x] x x x x x (x) [x x x x (x)] x x [x x x x šar]ri bēli-iá-a-ma
4. [^d]Marduk u ^dZar-pa-ni-tum mu-x [.] še-ret-ka dan-na-at
5. [(l)i]-mi-du kal-la šarrāni^{meš} iš-tu kurŠI-AŠ x [x x x x ad]i kurPa-ra-ši-i šap-li-[i/ti]
6. {x x (x)} x x x-ka u₄-mi-šam-[m]a la na-par-[ka-a ^dAš-šur] a-sib é-šár-ra nap-har x [x (x)]
7. [x x] x x x x x [x x] x x [x x x x ni(?) -iz(?)]-mat lib-bi šá šarru bēli-iá x [. . .]
8. [x x] x iš-pur-ru um-ma ZI-am-ma [x x x] x UR mat-ka¹ a-sap-pan u ka-a-š[ú(?) . . .]
9. [abu]l ^dIštar(15) né-re-bi šarru-ú-ti [x x x] x su ku a-a še ú ku-mu-ú šá ana šarri b[ēli-iá]
10. [x x (x)] x ki-ša[d]-su a-ku-ú za/šá [.] KAL iššur hurri(BURU₅-HABRUD-DA) šá itti ^{mušen}ka-su-su ip-pu-[šú]
11. [x x x x]-na(?) -bi šá KI x x x x x [x x x] x 'UR¹ na-x [a]t-ma-a ta-[ba]
12. [x x x x x] ul(?) x [x] x-QAR qí-bit-su x [x x x x x (x)] x ia u na-ka-su Z[I(?)^{tim(?)}]

13. . . .] x KUR-ka bīta rabā^a [.] x šá-ga-[x (x)]
 14. . . um-m]a arad-ka-ma šarru bē[li-iá] x x [. . .]
 15. . . .] x še(?) a-bu-ba u iz-z[a(-)] x x x x
 16. . . .] 'i-ha-an¹-x [.] x u ia-a-ši
 17. . . .] x-ka ni-ṭū-t[ú r]it-ku-su-ma KAL-bi x [.]-lu mi-tu-tu
 18. . . .]-ka ez-zu-tu lúšabē(ÉRIN)^{meš} ek-du-tu ni-[.] pa]l(?)-ha-ak šá la balāti(TIN) ut-ta²-a-am u₄-mi-šam

Reverse

19. . . .] x šá la balāti(TIN) zi-a ú-ša[b-]-ni ^{ld}Nabû(NÀ)-apla(A)-ušur(ÙRU) šarru ši-tul-tú
 20. . . .] x x x x { } i-sel-li-mu
 21. . . .] x x TAR x bi(?) x [.] x-na(?)-ku-ma
 22. [x x x x] šar[ru b]ēli-iá rit(?)-ta(?)-tú ^{ld}Šamaš-x | . . .
 23. [x x] x x x {x} x na UR ma-as-^fsu¹ x x [.] x x x [. . .]
 24. [x x x] x x x {x x} x x ekalli-iá la-an-du²u x x tu²u ha-as-su²u ma x [. . .]
 25. [x x x] x x x x x šá {x} x x x-šú-nu-ti-ma x-iá liq-bu-ú ki-i ana zi-k[ir(?) . . .]
 26. [x x x] x x x x x hi-ip x x [x] x pahāru(BÁHAR) x x gul lu ta k|u x]
 27. [x x x]-ši x x ri(?) [x] x x x [x] x-šú lib-ba-šú šar-hu li-ni-ih-ha-am-[ma]
 28. x x x x x x x x 'šarri(?)¹ b[ēli]-iá lu-gam-mir-am-ma [an]a maḥar(IGI) šarri bēli-iá lu-bil-lu
 29. ki-i x te-eg-gu-ú la te(?)-ri(?) x-x ma-as-şar-tú šar[ri] bēli-iá la at-ta-şar
 30. šarru bēli-iá liš-pu-ru-am-ma šá ina lib-bi-šú t{a(?) -b}u li-pu-uš
-
31. ši-piš-tu₄⁴ ^{ld}Sin-šarra-iškun(GAR)^{un} [šá]r 'māt¹ Aš+šur^{ki} šá x [x x x] x [x] 'a-na ^{ld}Nabū¹(NÀ)-apla(A×ZA(!))-ušur(ÙRU) bēli-šú iš-pur-ru
-
32. ki[mā(GIM)] x x x { } x šá lal(?) ina é-sag-gíl amru(IGI)
 33. . . .] x-šú dumu-a-ni Bābili(E)^k[i iti x-(x) UD.(x +)|5.KAM MU I.ME. x [. .]. KAM ¹A-lik-sa-an-dar šarri

Translation

- [To Nabopolassar], governor of Babylon, mighty king, with [full] discretion to act, whom Marduk, sage of heaven and netherworld,
- [. . . .] commissioned and entrusted the avenging of Akkad to his hand,
- [.] the king my lord,
- [May] Marduk and Zarpānitum, who . [.] impose your severe punishment.
- [(and) . . .] your . . . all the kings from . . . [.] to lower Parašû
- daily without ceasing. [May Aššur], who dwells in Ešarra, all . [. .]
- [.] the desire(?) of which the king my lord . [. . .]
- wrote [to] his [servant(?)], saying, “Arise and [.] I am going to devastate your land and [. . .] you!”
- [(At?)] the Ištar [Gate], the royal entrance, [.] who became [angry(?)]
- with the king [my lord]. The weak man . [.], the partridge, which wishes to share [a nest(?)] with a falcon

11. [...] a pleasant speech
12. [...] . . . his words . . my [...] and cutting the [throat(?)]
13. [...] your . . a great house, [...]
14. . . thus] says your servant, “The king my lord [...]
15. a flood-storm and
16. [.] . also me
17. . . . bound with your hitting . . and dead
18. . . . your fierce . . . , savage warriors, . . . in fear I complain(?) daily about dying

Reverse

19. dying. Shall(?) I arise and break(?) [...] Nabopolassar the king [...] a consultation
20. [...] they will be reconciled
21. [...]
22. [...] the king my lord
23. [...]
24. [...] who understand . . of my palace wise
25. [...] them and may they speak . . When at the mention(?) [...]
26. [...] the potter
27. [...] may his [...] quiet his fiery heart
28. may I complete the . . of the king(?) my lord and bring (it / them) to the presence of the king my lord.
29. Because you are not(?) lazy and not . . . I did not perform my duties to the king my lord.
30. May the king my lord write to me and do what he considers good.

31. Letter of Sîn-šarra-iškun, king of Assyria, which he wrote to Nabopolassar his lord.

32. According to , which was . . . and was found in Esagil.
33. [Tablet of , hand of his son. Babylon, [month . . , day (0)] + 5, year 100 + . . . of Alexander the king.

Notes

- 2: Compare the Nabopolassar letter BM 55467 obv. 10–12: ^d*Marduk . . . [a-n]a tur-ru gi-mil kur_{URI}^{ki} i-hi-it te-ne-tu-ú-a* ^{ib¹}*-ri lib-[bi] ki-i-n[i]*, “Marduk . . . to avenge Akkad inspected my omens and examined my steadfast heart.”
- 9: Restored from CT 51, 73:18; see George, BTT, p. 341.
- 10: A restoration [*iš-bu-u*] is possible, but not, apparently, [*iš-bu-u*]_s.
- 11: Probably restore [*qin-na x x]-na(?)-bi*.
- 13: A reading *ekalla a-[. . .]* is possible.
- 17: A similar use of “dead” occurs in *ABL* 469:obv. 7: *mi-tu-tu a-ni-ni*, “we are dead” (a letter in Babylonian script to a son of Ashurbanipal).

- 18: The clear *ut-ta-²-a-am* is not easily derived from any verb, e.g., *na²û* or *ta²û*, and the small emendation to *ut-ta-az(!)-za(!)-am* is worthy of serious consideration.
- 19: Perhaps restore *ú-ša[b-bar]*.
- 29: The tablet clearly does not offer *la* for the third sign. It could be *ma*, but *ki-i-ma* is unlikely in a Neo-Assyrian or Late Babylonian literary composition, so the emendation to *la* is attractive.
- 33: The only closely similar colophons are on *SBH* 14 and 17, which offer the years 164 and 162, respectively. Ours could be restored: MU 1.ME.6[0 + x].KAM.

PART FOUR
NOS. 45–88
THE SCHOLASTIC TRADITION

Nos. 45–53

Syllabaries A and B

Miguel Civil

Introduction

The Mesopotamian lexical tablets treated in text Nos. 45–61 can be classified in two general groups: lexical lists arranged according to the form (graphic or phonological) of the words (text Nos. 45–54), and lexical lists arranged according to meaning (text Nos. 55–61). An example of the first is syllabaries. After the eighth century B.C. the elementary training in school started with two simple syllabaries. The first one, Syllabary A (S^a) (text Nos. 45–49), is an adaptation of a late Old Babylonian list of signs. It has 211 signs, treated in about 400 lines. It includes, in its fullest form, the basic syllabograms, their reading, and their signs' names. In some cases the sign names are not the traditional ones but their reading as Sumerograms in Akkadian texts. Thus TIR is not called *terrû*—as in other syllabaries—but *qištu*, “forest.” For an unusual copy of S^a , accompanied by numbers, see text No. 54. The second, Syllabary B (S^b) (text Nos. 50–53), has two tablets for a total of 743 lines. In its fullest form it gives the logograms, their readings, and their Akkadian translations. Tablets with the full form of either syllabary are extremely rare, while copies from the hands of inexperienced schoolboys, with only the logograms and nothing else, number in the hundreds. The signs in such copies are frequently very poorly written, resulting in misleading pseudo-signs, e.g., in text No. 51, l. 132, the sign may look like LAGAB×AN, but no such sign should be assumed, since the whole syllabary tradition required LAGAB×HAL. All the fragments in the Metropolitan Museum collection have only the column of logograms. The absence of sign names and translations shows that the students learned the sign shapes by repeatedly writing them down, while the sign names and translations were learned by oral recitation.

45.

MMA 86.11.375A (+) MMA 86.11.375B

S^a Fragment

(+) MMA 86.11.558

Plates 64, 65

Later 1st millennium

H. 66 mm W. 102 mm Th. 29 mm (MMA 86.11.375A)

H. 49 mm W. 42 mm Th. 25 mm (MMA 86.11.375B)

H. 16 mm W. 20 mm Th. 12 mm (MMA 86.11.558)

Obverse

Sign (113) 1'. PIRIG×ZA (AZ)

(114) 2'. PIRIG×UD (UG)

- (115) 3'. PIRIG
(116) 4'. PIRIG×A.LIM (ALIM)
(117) 5'. HUŠ
(118) 6'. 'KIŠ'

Reverse

- 1'. (see Notes below)

Notes

Reverse

1': The reverse of this tablet does not have a sign list; it contains some undecipherable material.

Remarks

This is a small fragment of a writing exercise with S^a, signs 113–17 (ll. 216ff.), repeated at least four times in contiguous columns. Note, in the first place, that the signs have archaizing forms; compare, for instance, UET 7, 152–58. These “paleographic” exercises were intended to familiarize the apprentice scribes with the forms found on old monuments and old tablets. Note also that the different signs are given only once, while the signs regularly have as many lines as needed to account for the various readings.

46.

MMA 86.11.528

S^a Fragment

Plate 66

Later 1st millennium

H. 80 mm W. 45 mm Th. 14 mm

Obverse

(obverse broken with traces of signs)

Reverse

Central Column

(beginning of reverse broken)

- Sign (23) 1'. SU
(24) 2'. NU
(25) 3'. NA
(26) 4'. BA

- (27) 5'. ZI
- (28) 6'. GI
- (28) 7'. GI
- (29) 8'. 'GIM'
(remainder broken)

Left Column

- (beginning broken)
- (35) 1'. 'GÁ'
- (35) 2'. GÁ
- (35) 3'. 'GÁ'
(rest of column broken)

Notes

Reverse

4'-7': Note the repetition of GI (ll. 5'-7'), as in most copies of S^a, and the malformed BA (l. 4).

47.

MMA 86.11.533

S^a Fragment

Plate 66

Later 1st millennium

H. 35 mm W. 46 mm Th. 1.9 mm

Obverse

Right Column

- 1. [x]
- 2. [x]
- Sign (68) 3. UM
- (69) 4. DUB
- (70) 5. ŠID
(rest of column broken)

Left Column

- (49) 1. GIBIL
- (50) 2. KA

- (50) 3. KA
(50) 4. KA
(50) 5. 'KA'
(50) 6. 'KA'
(rest of column broken)

Reverse

Right Column

- (beginning of reverse broken)
1'. x
2'. x
3'. x
4'. x

Central Column

- (beginning broken)
1'. x
(27) 2'. ZI
(28) 3'. GI
(28) 4'. GI
(29) 5'. G[I₄]

Left Column

- (beginning broken)
1'. [x]
(79) 2'. [DUG]UD
(79) 3'. [DUG]UD
(79) 4'. [DUG]UD
(79) 5'. [DUG]UD

48.

86.11.530
Plate 67
H. 53 mm W. 39 mm Th. 26 mm

S^a Fragment
Later 1st millennium

Obverse

(beginning of obverse broken)

- Sign (7) 1'. HU
 (7) 2'. HU
 (7) 3'. HU
 (8) 4'. RI
 (8) 5'. RI
 (9) 6'. BI
 (9) 7'. BI
 (10) 8'. [NI]
 9'. x
 (rest of column broken)

Reverse

Right Column

(beginning of reverse broken)

- 1'. [x]
 2'. [x]
 3'. [x]
 4'. [x]
 5'. x
 6'. x
 7'. x
 (rest of column broken)

Left Column

(beginning of column broken)

- (14) 1'. LU(!)
 (14) 2'. LU(!)
 (14) 3'. LU(!)
 (15) 4'. RU
 (15) 5'. RU
 (15) 6'. R[U]

Notes

Reverse

Left Column

1'-3': The schoolboy wrote the sign KU instead of LU.

Remarks

This tablet is a small fragment of a typical S^a exercise, with the cursive signs of late Babylonian school tablets.

49.

MMA 86.11.470

Plate 67

H. 45 mm W. 33 mm Th. 18 mm

Obverse/Reverse(?)

S^a Fragment

Later 1st millennium

Sign (4) 1'. ḫHAR¹

(4) 2'. ḫHAR

(4) 3'. ḫHAR

(5) 4'. ḫAH¹(5) 5'. ḫAH¹(6) 6'. ḫA¹

(7) 7'. ḫU

(7) 8'. ḫU

(7) 9'. ḫU

(8) 10'. RI

(8) 11'. RI

(8) 12'. RI

Remarks

This tablet is a small fragment similar to text No. 48 with signs 4–8 of S^a.

50.

MMA 86.11.531

Plate 68

H. 47 mm W. 42 mm Th. 20 mm

S^b Fragment

Later 1st millennium

Obverse/Reverse(?)

Left Column

1'. x

170 2'. [Š]ÉŠ

- 171 3'. [MU]NŠUB
 172 4'. [G]UR₇
 173 5'. ERIN
 175 6'. SAG₉
 175 7'. SAG₉
 176 8'. GÁL

Right Column

- 1'. [x]
 2'. [x]
 215 3'. S[IG₄]
 216 4'. LAM
 217 5'. LAM×KUR(!)
 218 6'. LAM×KUR
 219 7'. BA
 220 8'. BA
 221 9'. ZU
 10'. [x]

Other Side

(miscellaneous signs of unclear content)

51.

MMA 86.11.532
 Plate 68
 H. 54 mm W. 25 mm Th. 14 mm

S^b Fragment
 Later 1st millennium

Obverse/Reverse(?)

Left Column

- 1'. x
 132 2'. LAGAB×HAL(!)
 133 3'. LAGAB×EŠ
 4'. LAGAB×[?]
 5'. LAGAB×[?]
 136 6'. LAGAB×GUD(?)
 134 7'. LAGAB×GUD+GUD (U₈)
 137 8'. LAGAB×SIG₇

138 9'. LAGAB×KÙ
10'. LAGAB×[X]

Right Column

1'ff. (traces)

Remarks

This tablet fragment offers ll. 132ff. of the first tablet of S^b in the left column. The right column must probably be placed around ll. 175ff. but is too poorly preserved for a positive identification. The signs treated in the left column are all compounds of the type LAGAB×X. At times the various school copies of this section show some disagreement in the sign sequence. These disagreements are typical of the group LAGAB×X; see the critical apparatus to the corresponding section of Proto-Ea (MSL 14, pp. 31–33). This remark also applies to the description of the next fragment, text No. 52.

52.

MMA 86.11.490

Plate 69

H. 27 mm W. 44 mm Th. 18 mm

Obverse/Reverse(?)

- 1'. 'LAGAB×X'
138(?) 2'. LAGAB×'KU(?)'
139(?) 3'. LAGAB×'LU(?)'
140(?) 4'. LAGAB×ME+EN
(end of column)
-

S^b Fragment
Later 1st millennium

Other Side

1'. (traces)

53.

MMA 86.11.510

Plate 69

H. 30 mm W. 43 mm Th. 20 mm

Obverse/Reverse(?)

S^b Fragment

Later 1st millennium

- 1'. x
153 2'. ESIR (A.LAGAB×KUL)
154 3'. NIGIN
155 4'. KU
156 5'. KU
157 6'. KU

No. 54

A Late Babylonian Number-Syllabary

Laurie E. Pearce

Introduction

The curriculum in the scribal academy, known in Sumerian as the é-dub-ba-a, “tablet house,” included lists of varying contents and lengths as well as compositions belonging to diverse genres.¹ Elementary students attained basic pedagogical goals through study and production of standardized sign-lists known as syllabaries. These lists facilitated the memorization of signs, along with their multiple readings and meanings, by presenting groups of signs in an order loosely defined by similarity of sign-sound or shape. Advanced students mastered the language of specialized disciplines by copying lists of technical terms preserved in professional vocabularies. They achieved proficiency in the production of literary and scientific texts by copying examples of those genres. The scribes’ familiarity with and mastery of traditional vocabularies of materials and culture facilitated the expansion of scribal scholarship. These processes are reflected in part through the development of commentaries (see texts Nos. 69–71) and other new text types, such as that preserved on MMA 86.11.364 (text No. 54).

In the first millennium B.C. scribes employed Syllabary A (S^a) (see p. 213), one of the three types of sign lists known from Mesopotamia,² as the foundation for two innovative text types reflecting the development and transformation of the Mesopotamian intellectual tradition.³ The obverse of MMA 86.11.364 preserves an example of one type of scholastic exercise modeled on S^a and belongs to a category known in modern parlance as a number-syllabary.

In number-syllabaries, numerals written in sexagesimal notation⁴ are paired with cuneiform signs listed in the order, and sometimes the frequency, in which they appear in S^a . The obverse of the present text is the most complete exemplar of the number-syllabary texts.⁵ Some modern scholars have suggested that these texts comprised a handbook that might have been used either in a type of “secret writing”⁶ or as an advanced hermeneutic technique.⁷ However, until the paired numeral-signs preserved in the number-syllabaries are attested in another context as substitutions for the standard cuneiform signs, it can only be concluded that these texts constitute another facet of the continuing development of the scholastic tradition.⁸

In texts from the late third millennium B.C. on, numerals substituted for some word signs.⁹ By the second millennium the numerals 15 for the direction “right” and 200 for “king” were among the most common substitutions.¹⁰ In the first millennium, an established series of numerals represented the major gods of the Babylonian pantheon.¹¹ The substitution of numerals for entire words found its fullest expression in a group of texts known as “numerically-written omen texts,”¹² in which diviners wrote the protases (predictive clauses) of astronomical omens entirely in numerals. In this category of text numerals represented each of the five planets known to the ancients (Jupiter, Venus, Mercury, Saturn, and Mars), the month in which a particular astronomical phenomenon was observed, and the verb describing the planets’ actions.

Each of the three columns on the reverse of MMA 86.11.364 contains a list of numerals associated with cuneiform signs grouped by semantic categories. The entries in column i primarily associate cardinal points of the compass

with numerals; those in column ii pair numerals with constellations and astrological signs, while those in column iii equate numerals with divine names. In light of the organization of the text on the reverse of the tablet, and in view of the fact that some of the equivalencies attested here are known to have been employed in other contexts, this unique section of text must be seen as a scribal reference guide to these numerical pairings.

1. As an institution, the scribal academy reached its floruit in the Old Babylonian period (ca. 1800–1600 B.C.). For descriptions of the curriculum and personnel of the scribal school in this period see Å. Sjöberg, “The Old Babylonian Eduba,” AS 20 (1976), pp. 159–79; H. Vanstiphout, “On the Old Babylonian Eduba Curriculum,” in J. W. Drijvers and A. A. MacDonald, eds., *Centres of Learning: Learning and Location in Pre-Modern Europe and the Near East* (Leiden, 1995), pp. 3–16. For the institution of the scribal school during the later first millennium see Gesche, *Schulunterricht*. For a general discussion of Mesopotamian scribes and scholars see L. Pearce, “Scribes and Scholars in Ancient Mesopotamia,” in J. M. Sasson et al., eds., *Civilizations of the Ancient Near East* 4 (New York, 1995), pp. 2265–78.
2. One type of standard list presents groups of three signs in which the consonant remains the same but the vowel changes according to the pattern, u-a-i. The first group of sign entries in this list is *tu-ta-ti*, followed by *nu-na-ni* and *bu-ba-bi*, etc. The repetition of the vowel pattern must have simplified the enormous task of learning the multitudinous and multivalent cuneiform signs. A second type of sign list, titled “Ea A = *nāqu*,” provided students and scribes with the Sumerian readings and Akkadian equivalents to numerous logographic signs (see MSL 14). S^a is the third type of sign list; it is published in MSL 3.
3. The cuneiform text V R 45 is the only other known text organized according to the pattern of S^a. This grammatical text presents verbal forms (based on actual and hypothetical verbal roots) in which the sequence of second signs (representing the first or only phoneme of the second syllable) of the verb forms corresponds to that of S^a signs. As the scholar-scribe exhausted his repertoire of verbal constructions beginning with a particular sign, he employed the next sign in the S^a sequence to generate successive groups of verbal forms. For relationships among various categories of scholastic and pedagogic texts from Babylonia and Assyria see Gesche, *Schulunterricht*.
4. For an explanation of the sexagesimal system in which numerical place notation is based on alternate groups of 1 and 6 see F. Thureau-Dangin, *Esquisse d'une histoire du système sexagésimal* (Paris, 1932), pp. 1–26; and A. Aaboe, *Episodes from the Early History of Mathematics* (New York, 1964), pp. 6–10.
5. Fragments of five additional number-syllabary texts are known. The texts in the British Museum, Rm. 806, BM 46603 (+) BM 46609, BM 47732, BM 77233, are published in L. Pearce, “The Number-Syllabary Texts,” JAOS 116 (1996), pp. 453–74. The fifth is published in von Weiher, *SpTU* 4, 218.
6. R. Borger, “Geheimwissen,” RLA 3, pp. 188–91. The suggestion that scribes employed a system of “secret writing” derives both from notations in colophons to literary and scientific texts stating that the contents of a particular tablet constituted the “secret lore” of the professional scribe or priest and from injunctions against “non-initiates” reading the text. For the formulae that express these concepts see Hunger, *Kolophone*, pp. 13–14.
7. S. J. Lieberman, “A Mesopotamian Background for the So-Called Aggadic ‘Measures’ of Biblical Hermeneutics?,” HUCA 58 (1987), pp. 157–225.
8. L. Pearce, “The Number-Syllabary Texts,” JAOS 116 (1996), pp. 462–63, cites the existence of the extra-canonical astronomical texts (the so-called *ahû* literature) as an example of the development of texts outside the received intellectual and textual traditions.
9. This is comparable to the principle employed in rebuses, in which either numerals or pictures of homophonous terms appear instead of common words; e.g., “4 Sale” is readily understood by speakers of English as meaning “For Sale.”
10. V. Scheil, “Notules,” RA 12 (1915), pp. 158–60, and R. Labat, “Jeux numériques dans l’idéographie susienne,” AS 16 (1965), pp. 257–60.
11. The numerical equivalents for the gods were: 60 = Anu, the head of the pantheon; 50 = Enlil, god of the atmosphere; 40 = Ea/Enki, god of wisdom and the cosmic waters; 30 = Šin, the moon god; 20 = Šamaš, the sun god; 15 = Ištar, goddess of love, war, and the morning star. CT 25, 50 + CT 46, 50 (= K. 170 + Rm. 520) preserves a handbook of these equations. An edition of

that text appears in A. Livingstone, *Mystical and Mythological Explanatory Works of Assyrian and Babylonian Scholars* (Oxford, 1986), pp. 30–35. These equations are frequently employed in historical and literary texts as well.

12. This genre of text is discussed by C. J. Gadd, “Omens Expressed in Numbers,” *JCS* 21 (1967), pp. 52–63; and H. Hunger, “Kryptologische astrologische Omina,” in M. Dietrich and W. Röllig, eds., *lišān mithurti, Festschrift Wolfram Freiherr von Soden zum 19.VI.1968 gewidmet von Schülern und Mitarbeitern*, AOAT 1 (Neukirchen-Vluyn, 1969), pp. 133–45.

54.

MMA 86.11.364

Plates 70, 71

H. 134 mm W. 106 mm Th. 37 mm

Number-Syllabary

Later 1st millennium

Obverse

Column i	Column ii	Column iii	Column iv	Column v
1'. [...]	x + 100	^l HAL	x [...]	[...]
2'. [...]	[x] + 30	^l UR	x [...]	[...]
3'. [...]	[x] + 30	^l NE	x [...]	[...]
4'. [...]	[x] + 27(?)	^l NE	[...] ^l E[GIR]	[...]
5'. [...] x ^l NI.NI	40, 5(?)	^l KA	x + 10 ^l DIM	[...]
6'. [...] x ^l BU	8, 20	^l [S]AG	21, 10 ^l MAR	[...]
7'. [...] x ^l SU[D]	6, 20	^l ŠÚR	3, 40 ^l DIB	x x [(x)] [^l x]
8'. [...] x ^l KU	12, 30	^l DU ¹	22, 10 ^l LAGAB	28, 40 [^l x]
9'. [...] x ^l LU	4, 25	^l SUH ¹	2 ^l NI	16, 40 [^l x]
10'. [...] x ^l RU	11, 50	^l KÁ	24, 10 ^l KAŠ	35, 50 [^l x]
11'. [...] x ^l HA	5	^l I	34 ^l LAH	31, 30 ^l Á[G]
12'. [...] x ^l KIR	^l 5 ¹ , 26	^l IA	33 ^l KAL	57 ^l KÚR
13'. [...] x ^l LI	10	^l ŠU	33, 20 ^l GU	2, 25 ^l BUR
14'. [...] x ^l LA	13, 20	^l ŠÀ	4, 40 ^l GA	14(?), 20 ^l BAR
15'. [...] ^l LJUM	6, 30	^l ŠA	51 ^l UB	1, 21 ^l SI
16'. [...] [^l Z]U	x + 36	^l ÚH	13, 20 ^l LAM	2, 24 ^l SI ₄
17'. [...] [^l x]	^l 1 ¹	^l AŠ	11, 10 ^l PI	14, 20 ^l PA
18'. [...] [^l x]	x + 15	^l ZAB	58 ^l DÙ	10 + x, 2 ^l U
19'. [...] [^l x]	[...]	^l UD	59 ^l IR	2, 13, 40 ^l Ù
20'. [...] [^l x]	[...]	^l AD	14, 10 ^l RA	15, 20 ^l MAŠ
21'. [...] [^l x]	[...]	^l DA	14 ^l KI	1, 17 ^l ŠÁ
22'. [...] [^l x]	[...]	^l TA	12 ^l DI	4, 21 ^l [AL]
23'. [...] [^l x]	[...]	^l TI	34 ^l ŠAR	4, 31 ^l IL
24'. [...] [^l x]	[...]	^l UJM	4, 30 ^l SA	4 ^l Ú
25'. [...] [^l x]	[...]	^l DUJB	1, 30 ^l NAM	7, 42 ^l LÁL
26'. [...] [^l x]	[...]	^l MEJS	21, 30 ^l AB	52, 30 ^l LÀL
27'. [...] [^l x]	[...]	^l URU]DU	[...] ^l GU ₄ ¹	[55] [^l ID]

Reverse

	Column iv	Column iii	Column ii	Column i
	[...]	[...]	[...] [...]	1 [...]
1'. [...]	[20]	^d UTU	60 + 40 ^{HUN}	1 x [...]
2'. [...]	30	^d 30	60 + 40 MÚL	1 <i>kit-tú</i>
3'. [...]	40	^d IDIM	120 MAŠ.MAŠ	^r IM ^{1.1}
4'. [...]	50	^d EN.LÍL	60 + 40 KÚŠU	2
5'. [...] x	15	^d 15	60 + 40 A	2 <i>tu⁻²-a-mu</i>
6'. [...] x	120	^d A-nu	60 + 30 ABSIN	IM.2
7'. [...] x	120 + 30	^d EN.LÍL	60 + 20 ÉRIN	3
8'. [...]	120 + 40	^d IDIM(?)	60 + 10 GÍR.TAB	3
9'. [...]	120 + 30	30	60 PA	IM.3
10'. [...]	120 + 20(?)	^d UTU	60 MÁŠ	4
11'. [...]	x + 20	MÚL	GU	4
12'. [...]	x + 30(?)	MÚL	ZIB ^{me}	4
13'.	[...]	MÚL	^H JUN.GÁ	IM.4
14'.	[...]	MÚL	MÚL	6 20 NU
15'.	[...]	MÚL	MAŠ.MAŠ	12 ^{GU(?)} 1 x x [...]
16'.	[...]	MÚL	[...]	

Translation

Obverse

(No translation is given for the pairing of numerals and signs.)

Reverse

	Column iii	Column ii	Column i
	[...]	[...]	1 [...]
1'. 20 (=)	Šamaš	60 + 40 (=) Aries	1 [...]
2'. 30 (=)	Sîn	60 + 40 (=) Taurus	1 (=) truth
3'. 40 (=)	Ea	60 + 60 (=) Gemini	South (wind)
4'. 50 (=)	Enlil	60 + 40 (=) Cancer	2
5'. 15 (=)	Ištar	60 + 40 (=) Leo	2 (=) twins
6'. 120	Anu	60 + 30 (=) Virgo	North (wind)
7'. 120 + 30 (=)	Enlil	60 + 20 (=) Libra	3
8'. 120 + 40 (=)	Ea	60 + 10 (=) Scorpio	3

9'.	120 + 30 (=)	Sîn	60 (=) Sagittarius	East (wind)
10'.	120 + 40 (=)	Šamaš	60 (=) Capricorn	4

11'.	...	Constellation: Aquarius	4
12'.	...	Constellation: Pisces	4
13'.	[...]	Constellation: Aries	West (wind)
14'.	[...]	Constellation: Taurus	380 ...
15'.	[...]	Constellation: Gemini	12 ... [...]
16'.	[...]	Constellation: [...]	[...]

Notes

Obverse

- Column i: The signs in this column represent signs 10a–21 of the standard S^a order. The traces of signs to the left of the syllabic signs represent their numerical equivalents. The ordinal numbers of the S^a signs used here are those assigned by R. T. Hallock and B. Landsberger (see MSL 3, pp. 5–6). In the transliteration of the text, the DIŠ preceding the syllabary sign is indicated by a superscripted numeral one.
- Column ii: Although several signs in this column are damaged, it is clear that the text adheres to the order of S^a signs numbered 46–71.
- 4': According to the standard S^a order, the sign GIBIL is expected here. The sign on the tablet is NE.
- Column iii: This column follows the S^a signs numbered 87–111.
- 9': According to the standard S^a order, the sign TAB is expected here. The sign on the tablet is NI.
- Column iv: This column follows the S^a signs numbered 128–44.

Reverse

Column i:

- 1'–3': The single vertical wedge is interpreted as the numeral one; it precedes the following numerals two, three, and four.
- 3': This line equates the numeral one with the word *kittu*, “truth,” because the sign DIŠ as a numeral can be read as gî (see MSL 14, p. 525, l. 69), a short form of gîš, and gi can also be read as a short form of gin(a), = *kittu* (cf. F. Köcher, “Eine spätbabylonische Ausdeutung des Tempelnamens Esangila,” *AfO* 17 [1954–56], p. 133, l. 20). Interpretation is courtesy of W. G. Lambert.
- 4’–14’: The standard numerical equivalents for South, North, East, and West (winds) are expressed by IM.1, IM.2, IM.3, and IM.4, as frequently attested in lexical, astronomical, literary, archival, and mantic texts (see B. Landsberger and O. R. Gurney, “Practical Vocabulary of Assur,” *AfO* 18 [1957–58], pp. 328–41; A. J. Sachs, “A Late Babylonian Star Catalog,” *JCS* 6 [1952], pp. 146–50; and *CAD* I/J, pp. 268–70 s.v. *ištānu*).

- Column ii: This column lists zodiacal signs, beginning with Aries, the first constellation in the zodiac, and continuing through Pisces, the last. Before the break in the tablet, the sequence appears to repeat, but only four lines of this second sequence are preserved. In some astronomical texts the signs of the zodiac are listed along with their ordinal equivalences, 1 to 12 (cf. Neugebauer, *ACT* 1050). However, in MMA 86.11.364 there is no pattern discernible in the pairing of numerals, all multiples of ten, with their zodiacal signs. Further, the scribe has not employed any presently known association between numerals and these signs.
- Column iii: The practice of writing divine names with numerical equivalents is well known in the cuneiform corpus. See W. Röllig, “Götterzahlen,” *RLA* 3 (1957–71), pp. 499–500; and Note 11 above (for the use of numerical equivalents for deities from the Ur III period on see I. J. Gelb, *Materials for the Assyrian Dictionary* 2, 2nd ed. [Chicago, 1961], p. 213 n. 275). By the sixteenth century B.C., this practice had become more widespread and is evidenced, e.g., in the inscription on the statue of Idrimi (see G. Oller, *The Autobiography of Idrimi: A New Text Edition, with Philological and Historical Commentary*, Ph.D. diss., University of Pennsylvania [Philadelphia, 1977]). See also CT 25, 50 + CT 46, 50 (K. 170 + Rm 520), a Neo-Assyrian text from the library of Nabû-zuqup-kēna, which contains a guide to divine names, their numerical equivalents, and a theoretical statement about the nature of those equations. In this text the gods are ordered according to the hierarchy of the pantheon. II. 6–11 lists the deities with their respective numerals: Anu (= 60), Enlil (= 50), Ea (= 40), Sîn (= 30), Šamaš (= 20), and Adad (= 6). The reverse contains additional divine names and numerical equivalents: Bēl Marduk (= 10), Ištar (= 15), Ninurta (= 50), Nergal and Šakkan (= 11), Gibil and Nuska (= 10).

At the beginning of MMA 86.11.364: rev. col. iii, the gods do not appear to be arranged according to the hierarchy of the pantheon. In fact, the first three preserved entries proceed from lesser to greater deity, prior to the introduction of Ištar in l. 5'. In ll. 6'–10', the divine names are arranged in descending order of prominence, starting with the head of the pantheon, Anu. The numerals assigned to the first four divine names in this column are the same values given in K. 170 + Rm. 520 (CT 25, 50 + CT 46, 50).

Additionally, ll. 6'–10' contain the unusual construction: “MIN, numeral, DN.” It is impossible to offer a convincing explanation for the presence of the MIN or ditto sign in this position. Therefore, the alternative suggestion can be made that the two vertical wedges be understood instead as “60 (+) 60,” or 120. While this suggestion has the advantage of maintaining the pattern and technique used throughout the present text, the resulting pairings remain unusual and otherwise unattested.

Remarks

MMA 86.11.364 is an academic or scholarly exercise text. The tablet preserves the most complete exemplar of the number-syllabary texts, in which the signs of S^a are paired with numerals. Comparison of the six known exemplars of the number-syllabaries shows that the scribes were consistent in their assignment of a particular numeral to an S^a sign (see the table of signs and numerical equivalences in J. Oelsner, “‘Number Syllabaries’: Das Keilschrift-Syllabar A mit Zahlwerten,” in M. Görg, ed., *Meilenstein: Festgabe für Herbert Donner. Ägypten und Altes Testament: Studien zu Geschichte, Kultur und Religion Ägyptens und des Alten Testaments* 30 [Wiesbaden, 1995], pp. 154–63; and L. Pearce, “The Number-Syllabary Texts,” *JAOS* 116 [1996], pp. 463–68).

In number-syllabaries, the order of numerals and signs within ruled columns differs from that typically found in lexical texts (for the arrangement of columns in lexical texts see MSL 14, p. xv). The expected lexical arrangement is: DIŠ; lexical entry; explanation, translation, or numerical equivalent. In MMA 86.11.364, as in all other number-syllabary texts, the numerical equivalent precedes the syllabary sign, typically introduced by the DIŠ sign. As in many lexical texts, vertical rulings separate columns. The arrangement of the signs within each column further confirms that the entries are to be read in the order: “numeral, DIŠ, S^a sign.” (See in addition L. Pearce, “The Cuneiform Number-Syllabaries,” *Iraq* 45 [1983], p. 137; and L. Pearce, “The Number-Syllabary Texts,” *JAOS* 116 [1996], p. 454.)

Although the lack of a clearly preserved edge of the tablet precludes an accurate determination of the original tablet size, the thickness and contour of the tablet suggest that at least 50% of the tablet is preserved. From the arrangement of text on this tablet, we can determine that the preserved portions of MMA 86.11.364, including traces of signs or numerical equivalents, represent approximately 45% of the sign forms in S^a. A tentative reconstruction of the layout of the remainder of the S^a text on this tablet is offered in Table 1 below. The reconstruction accounts for 200 of the 211 sign forms in S^a, leaving only 11 signs not represented or reconstructed on the present tablet.

The reverse of this tablet is unique in its presentation of numerical substitutions for three categories of logo-graphic signs. Although this practice was attested as early as the third millennium B.C., many of the substitutions attested here are unique and differ from those known from other sources. Thus, the text adds significantly to our evidence of the practice of numerical substitutions and increases our knowledge of scholastic practices among cuneiform scribes of the later part of the first millennium B.C.

Table 1: Reconstruction of the Number-Syllabary Text, MMA 86.11.364*

	Column i	Column ii	Column iii	Column iv	Column v
[#]	1	[#] 71			[#] 275–78
[#]	2	[#] 72–73	152–54	213–14	[#] 279–80
[#]	3	[#] 74–79	[#] 155–56	215	[#] 281–82
[#]	4–6	[#] 80	[#] 157	216–17	[#] 283
[#]	7	[#] 81–84	[#] 158	218–20	[#] 284–86
[#]	8–9	[#] 85–86	[#] 159–60	221–25	[#] 287
[#]	10–13	# 87–90	[#] 161	226	[#] 288–89
[#]	14–15	# 91–92	[#] 161a	[#] 227	[#] 290–92
[#]	16–17	# 93–96	# 162–64	[#] 228	[#] 293–95
[#]	18–20	# 97–103	# 165–66	[#] 229	[#] 296–98
[#]	21	# 104	# 167–68	[#] 230–32	[#] 299–300
[#]	22–23	# 105–10	# 169	[#] 233	[#] 301–3
[#]	24	# [111]	# [170]	[#] 234	[#] 304–6
[#]	25–29	# [112]	# [170a]	# 235	[#] 307–8
[#]	30–32	# [113–16]	# [171]	# 236	# 309
[#]	33–35	# [117]	# [172–75]	# [237–39]	# 310–11
[#]	36–38	# [118]	# [176]	# [240–42]	# 312–13
[#]	39–40	# 119	# [177]	# [243]	# 314–15
[#]	41	# 120	# 178–79	# [244]	# 316
[#]	42	# 121	# 180–83	# 245–46	# [317]
[#]	43	# 122	# 184	# 247	# [318–22]
[#]	44	# 123	# 185	# 248	# [323–24]
[#]	45	# 124	# 186–87	# 249	# [325–28]
[#]	46–47	# 125–27	# 188	# 250	# [329–32]
[#]	48	# 128–29	# 189–93	# 251	# [333]
[#]	49	# 130–35	# 194–96	# 252	# [334]
[#]	50	# 136	# 197	# 253	# [335]
[#]	51	# 137	# 198	# 254	# [336–40]
[#]	52–53	# 138	# 199	# 255–59	# [341]
[#]	54	# 139	# 200–202	# 260	[#] [342–43]
[#]	55–57	# 140–41	# 203–6	# 261	[#] [344–47]
[#]	58	[#] 142	# 207	# 262	[#] [348]
[#]	59	[#] 143	# 208–10	# 263	[#] [349–50]
[#]	60	[#] 144	[#] 211–12	[#] 264–65	[#] [351–52]
[#]	61–62	[#] 145	[#]	[#] 266	[#] 353–54
[#]	63–66	[#] 146–48	[#]	[#] 267	[#] 355
[#]	67–68	[#] 149	[#]	[#] 268–72	[#] 356
[#]	69	[#] 150	[#]	[#] 273	[#] 357
[#]	70	[#] 151	[#]	[#] 274	[#] 358

*Heavy lines surround the preserved portion of this text. All text outside of the heavy lines is reconstructed. The pound sign (#) indicates the placement of numerals. The Arabic numerals refer to the S^a numbers given in MSL 3, pp. 5–41, not to the sign numbers as presented in this text.

Nos. 55–60

Texts from the Series Urra = *hubullu*¹

Miguel Civil

Introduction

Lists arranged according to meaning comprise the second classification of lexical tablets (for lexical lists arranged according to the form of the words see text Nos. 45–54). The largest and better known example of the second type is the encyclopedic series Urra = *hubullu*. It consists of twenty-four tablets with the following themes: Tablets 1 and 2: terms needed to write administrative and legal documents; Tablet 3: trees; Tablets 4–7: wooden implements; Tablets 8–9: reeds and reed implements; Tablet 10: clays and pottery; Tablet 11: leather and leather objects, and copper; Tablet 12: bronze, silver, and gold; Tablet 13: domestic animals; Tablet 14: wild animals; Tablet 15: cuts of meat; Tablet 16: stones; Tablet 17: shrubs, herbs, and vegetables; Tablet 18: birds, and fish; Tablet 19: textiles; Tablets 20–22: geographic names, stars, and ropes; Tablets 23–24: food and drinks. Thematic lists similar to Urra can be found among the earliest Mesopotamian cuneiform tablets, but their fully bilingual form is a product of late Old Babylonian times (seventeenth century B.C.). Around the twelfth century B.C. the text received its final, fixed form, which was in use until the demise of cuneiform script. In its final form the series had about 9,700 entries. The reconstructed text has been edited by B. Landsberger et al., in MSL 5–11. The Metropolitan Museum of Art collection has two outstanding examples of Urra tablets (text Nos. 55, 56).

1. The lexical series labeled here Ur₅-ra (at the request of the editors) is called HAR-ra in its basic edition in MSL vols. 5 to 11 and in most lexicographic studies as well as in CAD. The evidence for the reading /ur/ of HAR when meaning “interest” has been known for a long time and is listed in B. Landsberger’s note in MSL 5, p. 9, note to l. 1. Since there are no sound phonological criteria to semantically apportion the various readings of HAR: /mur, hur, wur, ur, ar, har/ (for instance, over eighty percent of the alternations u : a are before r), and since a great deal of the lexical evidence is either late, reconstructed, or imprecise (S^a Voc. A 6’, for instance, gives only a single reading), it is this writer’s opinion that the traditional reading HAR-ra over the possibly phonologically more precise ur₅ should be maintained.

Nos. 55–56

Bilingual Vocabularies

55.

MMA 86.11.121

Plates 72, 73

H. 132 mm W. 71 mm Th. 41 mm

Publications: A. L. Oppenheim and L. F. Hartman, "The Domestic Animals of Ancient Mesopotamia according to the XIIith Tablet of the Series HAR.ra = *hubullu*," *JNES* 4 (1945), pp. 152–77; MSL 8/1, pp. 5–52

Obverse

Column i

1. udu.nítā	<i>im-me-ru</i>	sheep
2. udu. ⁿⁱ⁻ gu ŠE	MIN <i>ma-ru-ú</i>	grain-fed sheep
3. udu.ŠE.sig ₅	MIN MIN <i>dam-qa</i>	grain-fed beautiful sheep
4. udu.gír.gu.la	<i>ar-ri</i>	sheep "for the big knife"
5. udu.gír.ak.a	<i>kaṣ-ṣa</i>	shorn sheep
6. udu.ní.ak.a	<i>šá ana lib-bi ep-šú</i>	sheep with a big belly(?)
7. udu.nítā	<i>zi-ka-ri</i>	ram
8. udu.nítā.giš.dù.a	<i>im-me-ri šá ana ra-ka-bu uš-šu-ru</i>	ram good for breeding
9. udu.u ₅	<i>rak-ka-bu</i>	breeding ram
10. udu.ú	<i>im-me-ri šam-mu</i>	grazing sheep
11. udu.ì	MIN <i>šam-ni</i>	fat sheep
12. udu.SUG ^{as-lu} .LUM	«pa» <i>pa-sil-lum</i>	a variety of sheep
13. udu.as ₄ .lum.ŠE	MIN <i>ma-ru-ú</i>	same grain-fed
14. udu.as ₄ .lum.ŠE.sig ₅ .ga	MIN MIN <i>dam-qa</i>	same grain-fed beautiful
15. udu.as ₄ .lum.UDU.ḪÚL	MIN <i>gu-uk-¹kal¹-lu</i>	same fat-tailed
16. udu.SIK ^{sú-lu-hu} SUD	ŠU-u (=suluhû)	sheep with long fleece
17. udu.SIK ^{si-ki} dù	ŠU-u (=sikidû)	sheep with fleece
18. udu.mar.tu	<i>im-me-ri a-mur-ri-i</i>	Martu sheep (a variety)
19. udu.[ŠE]Š.UNU ^{ki}	<i>ú-ru-ú</i>	sheep from Ur
20. udu.uri.ki	<i>ak-ka-du-ú</i>	Akkadian/Babylonian sheep
21. udu. ^{ú-tu-ú¹} AMAŠ	<i>pu-ḥa-lu</i>	ram
22. udu.MIN AMAŠ	<i>ra-ki-bi</i>	breeding ram
23. udu ^{gu-uk-kal} .UDU.ḪÚL	<i>gu-uk-kal-lum</i>	fat-tailed sheep
24. udu.gukkal.ŠE	MIN <i>ma-ru-ú</i>	same grain-fed
25. udu.gukkal.ŠE.sig ₅ .ga	MIN MIN <i>dam-qa</i>	same grain-fed beautiful
26. udu.gukkal.fb.lá	<i>zib-ba-nu</i>	sheep trailing its tail

27.	udu.gukkal.tu	<i>gu-uk-kal-la-nu</i>	sheep similar to a fat-tailed one
28.	[udu].ad ₄ (ZA-tenū)	<i>ku-[ub]-bu-lu</i>	lame sheep
29.	[udu.kud].kud.du	<i>'hum-mu¹-[ur-tu]</i>	crippled sheep
30.	[udu RI].'RI.ga ¹	<i>[udu mi-qit-tum]</i>	dead sheep

Column ii

(no longer preserved)

Reverse

Column iii

- 1'. gud [...]
- 2'. gud [...]
- 3'. gud.x [...]
- 4'. gud.x [...]
- 5'. gud.x [...]
- 6'. gud.x [...]
- 7'. gud.[...]
- 8'. 'gud¹[...]

Column iv

360.	'anše'.[nī]g . . .	[<i>i-mir ši-mit-tum</i>]	harness donkey
361.	anše.bá[r.a].lá	'MIN ¹ <i>su-ru-du</i>	pack donkey
362.	anše.giš.gu.[za]	MIN <i>ku-us-su-ú</i>	saddle donkey
363	anše.giš.gigir	MIN <i>na[r-kab-tum]</i>	donkey for the chariot
364.	anše.mar.gíd.'da ¹	'MIN <i>e-riq¹-qa</i>	donkey for the wagon
365.	anše.bal	<i>t[e-nu-ú]</i>	exchange donkey
366.	anše.a.ab.'ba ¹	' <i>i-bi-lu</i> ¹	camel
367.	(does not exist on MMA tablet)		
368.	anše.gù.dé	<i>na-[gi-gu]</i>	braying donkey
369.	anše.gù.dé	<i>šá-gi-mu</i>	braying donkey
370.	a[nše.gu ₄ .ud.gu ₄ .ud]	[<i>ra(?)-qí-du</i>]	frisky donkey
371.	anše.dingir.ra	<i>i-me-ri i-lu</i>	donkey of a god
372.	anše.lugal	[MIN <i>šar-rum</i>]	donkey of a king
373.	anše.kur.ra	<i>si-su-ú</i>	horse
374.	anše.edin.na	<i>s[ír-ri-mu]</i>	onager
375.	anše ^{ur(!)} úr-gál-tak ₄ -e	<i>i-me-ri šá šap-ra [i-pe-tu-ú]</i>	donkey that “opens its haunches”
376.	ANŠE ^{du-ur} .NÍTA	<i>mu-ú-ri</i>	foal
377.	dùr.gù.dé	<i>na-gi-gu</i>	braying foal
378.	dùr.gù.dé	<i>šá-gi-mu</i>	braying foal
379.	[dù]r.gu ₄ .ud.gu ₄ .ud	<i>raq-qí-du</i>	frisky foal

380.	[dùr. ^{im}]KAŠ ₄ (!)	<i>la-si-mu</i>	running foal
381.	dùr.x	x x x	running foal
382.	ème(SAL.ANŠE)	<i>a-ta-nu</i>	mare, jenny
383.	muš	<i>sir-ri</i>	snake

Colophon

384. GIM BAD-ŠÚ [SAR-ma] IGI.KÁR
 385. IM ^lEN-[šú]-^rnu¹ [A-šú šá ^l(x x)]-^lMU^{1na}
 386. A ^lNa-^rx-x¹ ŠU ^{ld}EN-IGI.LÁ
 387. [A-šú] šá ^{ld}EN¹-MU-GIN A ^lx x¹
 388. [x (x)^{ki}] iti^{du}₆ UD 24.KA[M]
 389. [MU] ^r40¹ + [5](?).KAM ^{ld}A[G-NÍG.DU-ÙRU . . .

Translation

Colophon

384. [Copied and] collated with the original tablet.
 385–87. Tablet of Bēlšunu, [son] of [. . .]-iddin, descendant of Na- . . . , hand of Bēl-lūmur, [son] of Bēl-šumaukīn, descendant of . . .
 388–89. [City of . . .], Tašritu day 24 [year] 45(?), Ne[buchadnezzar . . .

Notes

The notes presented here refer only to this preserved text (the first 29 lines and the last 22 of the tablet) and not to the additional fragments published by A. L. Oppenheim and L. F. Hartman in, “The Domestic Animals of Ancient Mesopotamia according to the XIIIth Tablet of the Series HAR.ra = *hubullu*,” *JNES* 4 (1945), pp. 152–77, for which see the Remarks below. There are some traces of the beginnings of lines of column iv, with gud, “ox.” Although these entries can be restored from Hartman’s copy, they have not been included in this edition; the interested reader can see them in ll. 311ff. of the MSL 8/1 edition.

- 1: Between the initial wedge and the sign udu, which was written against the right-hand margin, there is a blank space. Following that is nítā, written over the dividing line. The catch-line at the end of the preceding tablet (Urра = *hubullu*, Tablet 12) has only udu. The remarks in *JNES* 4, p. 156, n. 6 are misleading.
- 2ff.: Ll. 2–3, 13–14, and 24–25 illustrate a scribal practice in the compilation of lexical lists: some classifications, such as size, quality, or color, are mechanically repeated after certain entries.
- 4: The Sumerian entry “sheep of the big knife” means that the size or thickness of the fleece is such that it requires a big shearing tool.
- 6: Text obscure; the Sumerian entry is probably corrupt; from the Akkadian one would expect udu šà (i)-ak-a. A duplicate (source S₂ in MSL 8/1) gives libiš (ÁB×ŠÀ), which can perhaps be considered a misreading of an original šà i-. In any case the meaning is doubtful, and the translation based on libiš is provisional.
- 21: The reading ^lú-tu-ú¹AMAŠ is based on collation by A. J. Sachs. The tablet is now damaged, and only traces of ^lú¹-x- x-(x) remain.

- 23: The fat-tailed sheep is a variety still common in the Near East; it has an adipose deposit in its tail.
- 360ff.: The Mesopotamian terminology of equids is extremely complicated. The present Urra passage, however, is relatively simplified; see J. N. Postgate, "The Equids of Sumer, Again," in R. H. Meadow and H. P. Wepermann, eds., *Equids of the Ancient World* (Wiesbaden, 1986).
- 389: The copy reads ^{1d}Nabû- . . . For the chronological problem implied by such a reading see *JNES* 4 (1945), pp. 152–53. The photo of the tablet made in 1932 shows a clear 45. The only king to have reigned 45 years was Artaxerxes II, but the traces on the copy, if correct, do not fit this name.

Remarks

This tablet is one of the essential sources for the reconstruction of Tablet 13 of the series Urra = *hubullu*. It deals exclusively with names of domestic animals, and when complete it must have been something like 380 lines long. Tablet 13 deals successively with sheep in general (181 lines), ewes (10 lines), goats (22 lines), kids (24 lines), lambs (39 lines), cattle (75 lines), and equids (28 lines). The present fragment, together with several other fragments, preserves the whole of cols. i–ii and iv–v, and parts of iii and iv of a six-column tablet of ca. 190×160 mm. Unfortunately, sometime between 1939 and 1945, during the process of attempted conservation, all fragments except for the present tablet were destroyed. The remaining portion of the text was baked and cleaned in the Metropolitan Museum during the 1960s. Some signs on the reverse are now more damaged than in the *JNES* copy made by L. F. Hartman in 1939 and published in *JNES* 4 (1945).

56.

MMA 86.11.368

A Vocabulary of Food and Drink Terms, Urra = *hubullu*,
Tablet 23

Plates 74, 75

Later 1st millennium

H. 25 mm W. 46 mm Th. 15 mm

Publications: A. L. Oppenheim and L. F. Hartman, "On Beer and Brewing Techniques in Ancient Mesopotamia According to the XXIIIrd Tablet of the Series *HAR.ra* = *hubullu*," *JAOS Suppl.* 10 (Baltimore, 1950), pp. 1–55 (note: the tablet in that publication is incorrectly identified as MMA 86.11.386); *MSL* 11, pp. 67–76

Obverse

Column i

(traces)

Column ii

2'. [kaš.tigi]	MIN te-[ge]- ¹ <i>e</i> ¹	beer for the tigi-songs
3'. KAŠ ^{ku-ru-un} GI ₆	<i>ku-ru-un-nu</i>	dark beer
4'. KAŠ ^{MIN} DIN	MIN	ditto
5'. kaš.kúrun(DIN) ^{MIN} .babbar	<i>na-áš-pu</i>	"white(?)" beer
6'. kaš.kúrun ^{MIN} .gi ₆	<i>ú-lu-šin-nu</i>	emmer beer
7'. [ka]š.zíz.A ^{x x¹-ši-ib(?)AN}	MIN	ditto

8'. [kaš.ul]ušin ^{MIN} .maḥ	ú-lu-šin-ma-ḥu	great emmer beer
9'. [kaš].sa₅	sa-a-mu	red beer
(80) 10'. [kaš].maḥ	kaš-ma-ḥu	great beer
11'. [kaš].2.ta.àm	ši-kar ši-in-nu-ú	2 (grain):1 (beer) beer
12'. kaš.3.ta.àm	MIN šu-lu-šú	3:1 beer
13'. kaš.1.ta.àm	MIN ma-al-ma-lu	1:1 beer
14'. kaš.ša.abzu	pe-tu-ú	beer “in the middle of the sea”
15'. kaš.níg.3.tab.ba	ši-kar šá-lul-ti	“triple” beer
16'. kaš.sag.gál.la	ḥar-ṣu	foaming beer
17'. kaš.sag.gál.la	hi-i-qu	foaming beer
18'. kaš.nu.sag.gál.la	la MIN	beer without foam
19'. [kaš.l]ù.a	dal-ḥu	cloudy beer
(90) 20'. [kaš.l]ù.a	ma-zu-ú	pressed/filtered beer
21'. [kaš.lù].lù.a	MIN	ditto
22'. [kaš.sur].ra	MIN	ditto
23'. [kaš.a.sù].sù	MIN	ditto
24'. [kaš.si].ga	za-ku-ú	clear/clean beer
25'. [kaš.dé ^{di-dí}]idé	ši-kar ma-aq-qa-tum	beer for libations
26'. [kaš.bal].bal	MIN	ditto
27'. [kaš.siz]kur	MIN ni-qí-i	beer for religious rites
28'. [kaš.siz]kur	MIN nap-ta-nu	beer for religious meals
29'. [kaš.bur].ra	MIN ni-qí-i	beer for religious rites
(100) 30'. [kaš.bur].ra	MIN nap-ta-nu	beer for religious meals
31'. [kaš.bur].sag	MIN ni-qí-i	beer for religious rites
32'. [kaš.bur].sag	MIN nap-ta-nu	beer for religious meals
33'. [kaš].nisag	MIN ni-sa-an-nu	beer for the offering of first fruits
34'. [kaš.gú].nisag	MIN kan-nu	beer for the jar rack
35'. [kaš.gú.m]e.zé	MIN ha-li-li	beer for the throat(?)
36'. [kaš.gú.me.zé].dùg.ga	MIN MIN ḥa-a-bi	beer pleasant to the throat(?)
37'. [kaš.A].SUD	hi-i-qu	diluted(?) beer
38'. [kaš]	MIN	ditto

Column iii

(20 lines broken)		
'x¹ [.]	[.]	[. . .]
1'. sa.ḥ[i.in]	[.]	[. . .]
2'. sa.ḥi.i[n.dù]	[šik-ka-tú]	yeast(?)
3'. si	[.]	[. . .]
4'. šim.di.a	[MIN]	[. . .]
5'. AMA ^{a-} ga-ri-in SIM	a-ga-[ri-in-nu]	“mother” (of the beer)
6'. a.ga.ri.in	[MIN]	ditto
7'. si.bùru ^{bu} -ru.da	mir-[qu]	pulverized yeast(?)

8'.	bappir	<i>bap-[pi-ru]</i>	barley bread
9'.	bappir.ḥád.tab.ba	MIN <i>maš-[te-e]</i>	ditto spread
10'.	bappir.šu.kin	MIN <i>s[i-ma-nu-u]</i>	ditto just right
11'.	bappir.pad.pad.da	<i>pi-[is(?)su(?)su]</i>	crushed (barley bread)
(140) 12'.	bappir. ^{du-ur} dur ₅	<i>rat-[bu]</i>	soaked
13'.	bappir.ḥád.a	<i>šá-[bu-lu]</i>	dried
14'.	bappir.UD	<i>na-[áš-pu]</i>	cleaned(?) barley bread
15'.	sún	<i>nar-[ta-bu]</i>	mash
16'.	sún.a.sur.ra	<i>ru-[uṭ-tu-bu]</i>	soaked mash
17'.	sún.a.sur.ra	<i>ri-[si-it-tum]</i>	rinsed mash
18'.	sún.lá.lá	<i>kar-[ku]</i>	pressed mash
19'.	sún.al.ak.a	[MIN]	ditto
20'.	sún. ^{ka-al} kal	<i>i-[di-tum]</i>	(?)
21'.	sún.dúb.dú.bu	<i>nu-u[p-pu-ṣu-ti]</i>	crushed mash
(150) 22'.	sún.al.gaz.za	<i>haš-[lu-tú]</i>	broken mash
23'.	sún.al.kum.ma	[MIN]	ditto
24'.	sún.šu.ak.a	<i>mar-[su]</i>	mash mix
25'.	sún.ka.lá.munu ₄	<i>šá pi-[rik-ti]</i>	(?)
26'.	zì. ^{mu-nu} munu ₄	<i>sim-[ma-nu-ú]</i>	flour and malt
27'.	BÁRA ^{ti-tab} MUNU ₄	<i>ti-[ta-pu]</i>	dried malt
28'.	titab.a.di.a	<i>ši-[pu-tum]</i>	watered malt
29'.	titab.si.ga	<i>šu-lu-[ku-tum]</i>	ready dried malt
30'.	titab.al.si.ga	[MIN]	ditto
31'.	titab.al.bur.ra	<i>pe-[tu-ti]</i>	“open” dried malt
(160) 32'.	titab.al.bur.ra	<i>haṭ-[tu-ti]</i>	spread dried malt
33'.	titab.u ₄ .zal.le	<i>sik-[ru-tum]</i>	warm dried malt
34'.	titab.u ₄ .zal.le	KAL-[. . . .]	(?)

Column iv

1.	titab.al.si.ga	<i>na-áš-[pu-tum]</i>	cleaned(?) dried malt
2.	titab.al.si.il.lá	[MIN]	ditto
3.	munu ₄	<i>bu-[uq-lu]</i>	green malt
4.	munu ₄ .a.di.a	<i>ši-p[u-tum]</i>	watered green malt
5.	munu ₄ .a.sur.ra	<i>ri-si-i[t-tum]</i>	rinsed green malt
6.	munu ₄ .si.è	<i>qar-n[a-nu]</i>	sprouting green malt
7.	munu ₄ .si.mú.a	MIN	ditto
(170) 8.	munu ₄ .ḥu.tu.ul	<i>bi-iq-l[e-tum]</i>	sprouted green malt
9.	munu ₄ .gu.la	MIN	ditto
10.	munu ₄ .gu.la	<i>na-šup-[tum]</i>	cleaned green malt
11.	munu ₄ .bur.ra	MIN	ditto
12.	munu ₄ .dúb.dú.bu	<i>nu-up-pu-ṣ[u-ti]</i>	compressed green malt
13.	munu ₄ .al.gaz.za	<i>haš-l[u-ti]</i>	green malt broken apart

14.	munu ₄ .al.kum.ma	MIN	ditto
15.	ka.lāl.munu ₄	<i>pi-ri</i> [<i>k-tum</i>]	(?)
16.	šita ₄ ŠI-ta.munu ₄	<i>pu-ut-[ru]</i>	“excrement” of green malt
17.	dúr ^{du} -ur.munu ₄	<i>pu-šil-[tum]</i>	remnants of drying the green malt
(180) 18.	lagab ^{la} -gab ^{ab} .munu ₄	<i>ši-bir-tum</i>	chunk of green malt
19.	egir.munu ₄	<i>na-aš-pil-tum</i>	residue of green malt
20.	MUG.munu ₄	<i>i-ri'-u</i>	lump of green malt
21.	gul.munu ₄	MIN	ditto
22.	šá.munu ₄	<i>šá-mu-nak-ku</i>	“heart” of the malt
23.	ba.ba.za.munu ₄	<i>pap-pa-su</i>	malt soup
24.	lá.munu ₄	<i>kar-ka-ṣu</i>	green malt to chew
25.	níg.àr.ra	<i>mu-un-du</i>	groats
26.	níg.àr.ra.sig ₅ .ga	<i>dam-qa</i>	fine groats
27.	níg.àr.ra.sig ₅ .ga	<i>za-ku-ú</i>	clean groats
(190) 28.	níg.àr.ra.sig ₅ .ga	<i>kab-x</i>	coarse(?) groats
29.	níg.àr.ra.šu.ùr.ra	<i>sar-[. . .]</i>	(?)
30.	níg.àr.ra.bu ₅ ^{bu} -bu ₅	<i>kak-ku-[su]</i>	. . . groats
31.	níg.mur.gu ₄	<i>ši-i[ḥ-tu]</i>	mash (as fodder for cattle)
32.	lá.níg.mur.gu ₄	<i>'ki'-{x-x}</i>	leftovers from mash
	(rest of column broken)		

Column v

(217) 1.	[zì.iš]	[ku]-uk-ku-šu	. . . flour
2.	[zì.]	[ḥ]a(?)-am-šu	. . . flour
3.	[zì.sim.ma]	[n]a-pu-ú	sifted flour
(220) 4.	[zì.kušlu.úb.gar]	qí-me ši-di-tum	flour for travel provisions
5.	[zì.]	MIN MIN	ditto ditto
6.	[zì.ninda].'kaskal'	MIN MIN	ditto ditto
7.	[zì.mad].gá	<i>ma-aš-ḥa-tum</i>	flour for ritual burning
8.	[zì.dub.du]b.bu	qí-me ma-aq-qí-tum	flour for libations
9.	[zì.dub.djub.bu]	MIN si-ir-qí	flour for a rite
10.	[zì.sur].ra	MIN MIN	ditto ditto
11.	[zì.sur].ra	ŠU-u	flour to draw magic lines
12.	[zì.si].gar	qí-me ši-ga-ri	flour for the (door) bolt
13.	[zì.ḥé].da.di	ŠU-u	flour for a rite
(230) 14.	[zì.x].li	ŠU-u	flour for . . .
15.	[zì.a].tag.ga	qí-me me-e lap-tum	flour damaged by moisture
16.	[zì.a].nu.tag.ga	MIN MIN la MIN	flour not damaged by moisture
17.	[zì.uḥ].tag.ga	MIN «MIN» kal-ma-tum MIN	flour damaged by insects
18.	[zì.š]u.bal.ak.a	MIN šu-pil-tum	flour from the trade
19.	[ninda] ^{nin-da-si-ki} UD	a-kal si-i-ki	bread . . .
20.	[ninda]. ^{si-ga} KAL	MIN ḥi-iš-le-e-tum	(ll. 20–29: various types of bread)

21.	[ninda].zi-kum _{UD}	MIN <i>is-qu-uq-qu</i>
22.	[ninda.U]D ^{MIN} .sig ₅ .ga	MIN MIN <i>dam-qu</i>
23.	[ninda].sag	MIN <i>tak-ka-se-e</i>
(240) 24.	[ninda.sag].sig ₅ .ga	MIN MIN <i>dam-qu</i>
25.	[ninda.zì.da-bi]-in _{SE}	MIN <i>tap-pi-in-nu</i>
26.	[ninda.zì.ku-ku-u] _I š	MIN <i>ku-ku-ši</i>
27.	[ninda.zì.Iš. ^b]u ^b bu ₅ .bu ₅	MIN <i>tu-ma-gu</i>
28.	[ninda].zalag	MIN <i>kip-re-e-ti</i>
29.	[ninda.zì.gal.gal].la	MIN <i>su-me-da-ti</i>
30.	[níg.šíD ^{si-la-ag}].gá	<i>li-i-šú</i> dough
31.	[ninda.kur ₄ ^{kur.r}]a	<i>ki-ir-ṣu</i> dough lump
32.	[ninda.du ₈ .d]u ₈	MIN ditto
33.	[ninda . . .] x	<i>a-kal 'x-x-tum'</i> (?)
34.	[ninda . . .]	x ]
		(rest of column broken)

Notes

Column ii

- 5': Derivations, or apparent derivations, from *našāpu* are frequent in brewing terms; see col. iii 14', col. iv 10. TIM 9 88 has *munu₄ bu-ul-la* = *bu-uq-lam i-ši-ip* (l. 9) and *níg-bu-ul mu-nu₄* = *nu-ša-ap-ti bu-u[q-lim]* (l. 14). The *gu-la* of the present line stands thus for *bu-la*. The verb *našāpu* normally means “to blow away, to winnow.” While this meaning fits col. iv 10 and TIM 9, 88, the entries col. ii 5' and col. iii 14' (with logogram UD, never used for *našāpu*), and col. iv 1 (with si-ga) seem to be something else. In the first two instances the word is probably *našbu*, found in the dictionaries under *nešbû* adj. (*CAD N/2*, p. 191) and *nešbûtu* (*AHw* 782b). This writer had previously proposed a meaning of “dried up” (“Studies on Early Dynastic Lexicography,” *Oriens Antiquus* 21 [1982], p. 2 n. 4), which would go well with the logogram UD and would apply to the present entries in col. ii 5' (but what would “dried beer” be?) and col. iii 14'. The case of col. iv 1, however, remains uncertain; note that si-(g) is a logogram for *šeþû*.
- 7': The gloss is unclear and perhaps written over erased text; there is a full sized A after the first (or second?) sign of the gloss.
- 11'ff.: There is a certain amount of confusion among Assyriologists about two different sets of numerical data mentioned in the texts in connection with brewing. One is the ratio between the volume of grain and the volume of beer obtained from the grain, which is inferred from the Pre-Sargonic economic texts from both Girsu and Ur (D. Charpin, *Le clergé d'Ur au siècle d'Hammurabi: (XIXe–XVIIIe siècles av. J.-C.)* [Geneva, 1986], pp. 307–10). The expected values are between 2:1 and 1:1, with the most common ones in the range 1.8:1 to 1.5:1, precisely the ones provided by the texts. The second set of numbers refers to repeated soakings of the mash (sparging). The expected values are in the quite similar range 1 to 3. A first soaking and filtering (the hulls do most of the filtering and a special filter is not needed) gives a wort, which is cloudy and has a sugar content of 18% (which after fermenting will produce the alcohol). Sometimes the same wort is poured again to obtain a clear beer (see ll. 19' and 24'). Pouring warm water on the mash again produces a second wort of ca. 6% sugar, and doing the same a third time produces a wort with only 1.5% sugar, at which point

the mash is considered spent. To complicate things, Sumerian seems to use similar expressions *n-ta* in both cases. The gradation from strong to weak is explained in a literary passage (*Contest of the Shepherd and the Farmer* 47–56; see edition by Y. Sefati, *Love Songs in Sumerian Literature: Critical Edition of the Dumuzi-Inanna Songs* [Ramat Gan, 1998], pp. 326–27), which does not use numerical terms. The farmer matches with beer products the dairy presents of the shepherd. The brewing products are listed as *kaš-sag*, “full strength beer,” followed by *kaš-sig₅*, “good beer,” *kaš-sa-gi₄*, “second sparging beer,” *kašbir*, “the weakest (third sparging) beer,” and, finally, *ha-ḥa-la*, “the mash residue.” The verbs used show that the last item was a solid. The Urra entry corresponding to *ḥa-ḥa-la* is now preserved in the new Uruk text, von Weiher, *SpTU* 3 115:col. iv 7–8: *duḥ-ḥal-ḥal-la*, *duḥ-ḥal-ḥal-la-e-dè* (Akkadian not preserved); for other references see *CAD H*, p. 41 s.v. *ḥalhallu* adj. Since Sumerian seems to prefer non-numerical terms to designate the different sparrings, it can be assumed that the present lines 11’–13’ refer to the grain to beer ratio (a ratio 2 to 1 will give a very powerful beer, and 3 to 1 is somewhat unrealistic), while line 15’ refers to beer from a mash already soaked twice.

- 6’: Emmer wheat (*zíz*) was sometimes added to the bread and malt, both made of barley, to obtain a high quality beer, also called “red beer.”
- 14’: The word for “sea” is *abzu*, with mythological and cultic implications (it also designated a water basin in a temple). Here it must be a colloquial term to designate a certain stage of wort or beer.

Reverse

Column iii

- 7’: The Sumerian means “of the holes,” possibly what remained in holes of the filtering vat (also used as yeast?).
- 10’: It is assumed that the Akkadian is *simānu*, “the right moment,” and not (*i*)*simmanū* (see l. 26’).
- 26’: The term “flour (and) malt” belongs to a type of Sumerian nominal compound in which two terms are used to designate a full semantic set; here it designates all kinds of brewing supplies.
- 32’: Correctly read *haṭ-tu-ti* in *CAD H*, p. 153 s.v. *haṭṭu* adj., because of the lexical passage quoted *ibid.* s.v. *haṭṭātu* B; MSL 11, 160 has PA-*ṭu-ti*.

Column iv

- 17’: Read still *pu-TAR-tum* in MSL 11, 73; the reading *pušiltum* is given in TIM 9, 88:15: *egir munu₄* = *pu-ši-iš-tum*.
- 24’: Translation is based on Sumerian *zú-gaz-munu₄* = *karkaṣu* (TIM 9, 88:16).

Column v

- 28: Reading is based on the analogous entry *zi-zalag^{za-al-ga}* = *qí-me kip-re-e-[tū]*, in von Weiher, *SpTU* 3, 115:col. iv(!) 26; MMA 86.11.368 also has *kip*, instead of *ṣab*.

Remarks

This piece is the lower right quarter of a three-column tablet, which until the recent publication of a similar text from Uruk (von Weiher *SpTU* 3, 115) was the major source for the reconstruction of Urra XXIII. This tablet was published in 1950 by A. L. Oppenheim and L. F. Hartman in a monograph filled with interesting remarks and suggestions for interpretation. A more complete edition can be found in MSL 11, pp. 67–76 (still without the new

Uruk text). Urra XXIII is a list of foods: a) soups and liquid dishes (ca. 60 lines or fewer), b) beer and brewing supplies (at least 140 lines), and c) flour, groats, and breads (149 lines). Only sections b and the first half of c are restored satisfactorily; of the rest only small fragments and excerpts are preserved. It is not possible to discuss the text in detail here. That would entail a study of the brewing process, which consisted, in general terms, of making a mash (*sún*) by an infusion of water and a mixture of barley bread (*bappir*) and a dried ingredient (*titab*) made from green malt (*munu₄*), letting the resulting wort ferment, and drinking the final product, beer (*kaš*), with straws. The mash was re-used in repeated filterings (spargings) to make more diluted beer, and the final grain residue was used as a coarse food or for animal fodder. Fragments of an Akkadian “manual” (TIM 9, 51–52, PRAK C 126) and of a bilingual “phrase book” (TIM 9, 88; see D. Foxvog “A Manual of Sacrificial Procedure,” in H. Behrens et al. eds., *DUMU-E₂-DUB-BA-A: Studies in Honor of Åke W. Sjöberg*, Occasional Publications of the Samuel Noah Kramer Fund 11 [Philadelphia, 1989], p. 173) to make beer have been found, but they are too fragmentary to make much sense of them. Needless to say, the meaning of many of the entries is difficult or even impossible to ascertain.

Nos. 57–60

Exercise Tablets with Excerpts from Urra = *hubullu*

57.

MMA 86.11.435

Plate 76

H. 29 mm W. 53 mm Th. 23 mm

Fragment of School Exercise Tablet, Urra = *hubullu*,

Tablet 1

Later 1st millennium

Urra I 1–16

Obverse(?)

Column i

1. ur ₅ -ra	<i>hu-bu-lu</i>	loan with interest
2. eš-še-dé-àm	<i>hu-bu-ut-ta-tum</i>	interest-free loan
3. šu-lal	<i>qi-<ip>-tum</i>	[see Note below]
4. še-bal	<i>'šu-pel-tum'</i>	exchange
5. níg-ba	<i>[qí-iš]-¹tum¹</i>	gift
6. i-na-an-b[a]	<i>[i]-qiš</i>	he gave

Urra I 37–40

Column ii

1. níg-SAL-[ús-sa]	<i>[ter-ha-tum]</i>	bride payment
--------------------	---------------------	---------------

2. níg-x-[...] [...]
 3. níg-šu-[sum-mu] [...]
 4. níg-m[u-pà-da] [...]
 5. níg-[...] [...]

Reverse(?)

- 1'. ú x x x x KASKAL^{II} a-n[a še-pi-šú (?)]
 2'. x x x a-šak-ka-an [...] . . .
 3'. TIN.TIR^{k[i]}

Note

3: According to *CAD* s.v. *qiptum*: “an amount of silver entrusted to an agent for buying goods to be sold on consignment, or the consigned goods themselves, on which interest is not charged until a particular (usually unspecified) period has elapsed.”

Remarks

The obverse(?), which preserves part of two columns, contains excerpts from Urra I 1–6 and Urra I 37–40. The reverse(?) contains unidentified literary excerpts, perhaps also written in two columns.

58.

MMA 86.11.301
 Plate 76
 H. 31 mm W. 32 mm Th. 17 mm

Urra XIV 358–59

Obverse

1. [kišig]-'sig₇-sig₇' ár-[qu] yellow ants
 2. [kišig]-'RI-RI^l-ga m[ut-tap-ri-šu] flying ants
 (rest of the XIVth tablet of Urra and excerpts from XV to XIX broken)

Fragment of a School Exercise Tablet, Urra = *hubullu*,
 Tablets 14, 20, 21
 Later 1st millennium

Urra XX unplaceable

Reverse

- 1'. a-[šà] [...] . . .
 2'. a-šà [.] [...] . . .

Urra XXI, Section 2:9–12

- 3'. Zimbir^{ki} S[ippar] (the town of) Sippar

4'. Zimbir-edin-na ^{ki}	[MIN ša ſēri]	Sippar of the desert
5'. Zimbir-ul-lí-a ^{ki}	M[IN ša ſāti]	Old Sippar
6'. Zimbir- ^d Utu ^{ki}	MIN [ša Šamši]	Sippar of the Sun God

Notes

Obverse

- 1–2: For the context of Urra XIV see MSL 8/2, p. 39.
 2: The ga of this late recension is incorrect, since in this entry the RI-sign has to be read dal, “to fly.”

Reverse

- 1'–2': Urra XX has over one hundred field names, beginning with a-šā, “field” (not all of them are preserved).
 3'–6': For the context of Urra XXI see MSL 11, p. 12. For the various Sippar towns see D. Charpin, “Sippar: deux villes jumelles,” RA 82 (1988), pp. 13–32; and H. Gasche, *La Babylonie au 17ème siècle avant notre ère: approche archéologique, problems et perspectives*, Mesopotamian History and Environment, series 2, mémoirs 1 (Ghent, 1989), pp. 112–16.

Remarks

This tablet is an example of the most common type of school exercise after the seventh century B.C. It consists of a series of brief excerpts—regularly from four to six lines long—from successive tablets of a lexical series. In many cases these excerpts are preceded by an excerpt from a literary text. The tablet fragment MMA 86.11.301 seems to have had four-line sections from the Urra Tablets XIV to XXI.

59.

MMA 86.11.358

Fragment of a School Exercise Tablet, Urra = *hubullu*, Tablet 3
Later 1st millennium

Plate 77

H. 76 mm W. 54 mm Th. 42 mm

Obverse

(excerpt of an unidentified incantation)

Urra III 24–32

Reverse

1'. [giš.til-l]a-g[eštin]	[<i>tillatu</i>]	grape cluster
2'. [giš.p]a-pa-al [geštin]	[MIN]	grape cluster
3'. [giš].pa-pa-al-g[eštin]	[<i>papallu</i>]	grape leaf
4'. [gi]š.pa-pa-al-tur-gešt[in]	[MIN ſeħru]	small grape leaf

5'. [giš].ama-geštin	[ummu]	offshoot of a grapevine
6'. [giš].pe-eš-pèš	[tittu]	fig (tree)
7'. [giš].la-al-làl	t[i- ² i-tu]	fig
8'. [giš.a]ma-giš pe-eš-pèš	kan-n[i MIN]	offshoot of a fig tree
9'. [giš. ^b]a-áš-hu([!])-[^{ur} hašhu]r	ḥ[a-aš-hu-ru]	apple

Notes

Obverse

1'–9': For a complete edition of this passage see MSL 5, pp. 94–97.

Remarks

This exercise tablet has remains of an incantation on the obverse and part of Urra III (a list of trees) on the reverse.

60.

MMA 86.11.377B

Fragment of a School Exercise Tablet, Urra = *hubullu*, Tablet 3
Later 1st millenniumPlate 77
H. 34 mm W. 35 mm Th. 27 mm

Obverse(?)

1. [giš].taškarin	<i>taš-ka-[ri-in-nu]</i>	boxwood
2. [giš].esi	<i>ú-š[u-ú]</i>	ebony(?)
3. [giš].šir	<i>sa-mul-[lum]</i>	white sandalwood(?)
4. [giš.ḥa-lu-ú]b	<i>ḥu-lu-u[p-pu]</i>	oak tree
5. (traces)		

Reverse(?)

(see Remarks below)

Upper Edge(?)

(see Remarks below)

Notes

Obverse(?)

1–4: The beginning of Urra III lists valuable, mostly exotic trees; ll. 1 and 4 list trees from the northern or mountain regions; ll. 2 and 3, imported woods. See MSL 3, p. 92, for the context.

3: This tree is found in CAD S, p. 112 s.v. *samānu* B.

Remarks

This small fragment is from the upper edge, close to the right corner, of a tablet similar to the preceding one. The obverse(?) has the beginning of Urra III; the preserved part of the reverse(?) contains two columns separated by a ruled line and with a final horizontal ruling. The main and lower right-hand parts appear to have been written by the same scribe, while the lower left section, from the appearance of scribblings, seems to have been written by a student scribe. The upper edge(?) contains various wedges (numerals?) inscribed in yet a different hand and written vertically from the left to right edge.

No. 61**Late Babylonian Grammatical Text***Miguel Civil***Introduction**

MMA 86.11.61, a Late Babylonian grammatical text, was first published by S. H. Langdon in “Syllabar in the Metropolitan Museum,” *JSOR* 1 (1917), pp. 19–23. It is a small, nicely written, one-column tablet, written or owned, according to its colophon, by the otherwise unknown scribe Bēl-upaqqa, son of Bibbūa. The colophon does not give any date.

It is a bilingual text with the Sumerian entries in the left column and, facing them, the Akkadian translations in the right column. The contexts of the forty-seven lines are somewhat heterogeneous: the tablet starts with imperative clauses, then lists a series of particles (demonstrative pronouns, adverbs, and conjunctions), and ends with numerals. The text is part of a series, since at the end there is a catch-line giving the incipit of the following tablet. Presently, the text cannot be placed in any known series.

Selected Bibliography

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T. Jacobsen, “Very Ancient Linguistics: Babylonian Grammatical Texts,” in D. Hymes, ed., *Studies in the History of Linguistics: Traditions and Paradigms* (Bloomington, 1974)
R. Hallock and B. Landsberger, *Neo-Babylonian Grammatical Texts*, MSL 4 (Rome, 1956)

61.

MMA 86.11.61

Plates 78, 79

H. 82 mm W. 64 mm Th. 23 mm

Publications: S. H. Langdon, "Syllabar in the Metropolitan Museum," *JSOR* 1 (1917), pp. 19–23; MSL 4, pp. 163–65, with corrections in MSL 5, p. 198

Obverse

	Column i	Column ii	
1.	[da-d]a-ra-ag-ab	<i>ši-it-pàr</i>	gird yourself!
2.	{za]g-kešda-ag-ab	<i>ki-iṣ-ṣa-ar</i>	gird yourself!
3.	'eš'-dára-ag-ab	<i>it-bé-et</i>	gird yourself!
4.	ka-mu šu-an-bar	<i>pi-ia uš-šu ur</i>	my mouth is free
5.	ne-en-na	<i>an-na-an-na</i>	so-and-so, someone (here)
6.	li-el-la	<i>ul-la-al-la(!)(tablet: du)</i>	someone (over there)
7.	a-šà-bi BUL+BUL-un-nam	A.ŠA-šú <i>ki-a-am ki-a-am</i>	his field, now and then
8.	še-bi ne-en-ne-en-nam	ŠE-šú MIN MIN	his barley, now and then
9.	ne-e-gin ₇	<i>ki-ma ki-a-am</i>	like so/this
10.	ne-en-na-gin ₇	<i>ki-ma ki-a-am</i>	like so/this
11.	i-gi-in-zu	<i>tu-šá-ma</i>	furthermore
12.	nam-ga	MIN	ditto
13.	nam-ga	<i>mi-in-di</i>	perhaps
14.	nam-ga	<i>ap-pu-na</i>	furthermore
15.	nam-ga	<i>pi-qá-at</i>	perhaps
16.	ir-ta	<i>pi-ša-ri^{be-pi}</i>	(?)
17.	nu-un-še	<i>il-la-a-a</i>	unwillingly
18.	nu-un-še	<i>le-e-mu</i>	disobedient
19.	nu-ub-dam	<i>la-ma</i>	not yet
20.	nu-ub-dirí	<i>la-ma-a-tar</i>	it's not enough!
21.	al-dím	<i>an-nu-ú</i>	yes
22.	ḥé-àm	MIN	ditto
23.	na-nam na-nam	MIN	ditto
24.	in-nu	<i>ú-la</i>	no
25.	gul-la	<i>ú-la</i>	no

Reverse

26.	na-nam	<i>la-a</i>	no
27.	nam	MIN	ditto
28.	ḥé-en-na	<i>lu-ma-an</i>	now
29.	ḥé-àm	<i>lu-ú</i>	let it be so
30.	ḥé-àm	<i>ma-ga-ru</i>	please

31.	lú-ga	<i>ma-ga-ru šÁR-ú-a</i>	please, . . . (?)
32.	lú-ga-a	MIN	ditto
33.	me-er-ga	<i>iš-te-en</i>	one
34.	diš-a-kám	<i>iš-ti-iš-šu</i>	in the first place
35.	tak ₄ -a-bi	<i>ša-nu-ú-um</i>	second
36.	an-ga-àm	2	ditto
37.	dah̄-he	3	ditto(!)
38.	peš	4	third
39.	min-tab	<i>šu-ta-aš-nu-ú</i>	double
40.	eš ₅ -tab-ba	<i>šu-ul-lu-šu</i>	triple
41.	peš	<i>ša-la-aš-ti</i>	three
42.	peš-bal	<i>er-bé-et</i>	four
43.	peš-bal-gi ₄	<i>ha-an-še-et</i>	five
44.	peš-peš-gi ₄ -gi ₄	<i>ši-iš-še-et</i>	six
45.	peš-peš-gi ₄	<i>si-bé-et</i>	seven
46.	peš-bi	<i>ša-al-šu</i>	third
47.	peš-gi ₄ -bi	<i>re-bu-ú</i>	fourth
48.	sag	<i>mi-i-rum</i>	head (of cattle)
49.	4[0+7 M]U.BI.IM GAB.RI KÁ.DINGIR ^{meš.ki}	GIM BAD SAR-ma	
50.	[.]	¹ x ¹ ^{1d} EN-ú-pa-qa DUMU ¹ Bi-ib-bu-ú-a	

Translation

Colophon

49–50. Forty-seven are its lines, copy from Babylon, written according to an old (tablet) [.] Bēl-upaqqa, son of Bibbūa.

Notes

Obverse

- 1–3: Three practically synonymous imperatives; for an Old Babylonian parallel see “Old Babylonian Grammatical Texts XII,” in MSL 4, p. 119, ll. 3–6.
- 4: The Akkadian with a genitive possessive suffix *ya* is incorrect; compare Nabnītu IV 5 (MSL 16, p. 76) with the same phrase but without the possessive suffix. The meaning of the expression “my mouth is free” is uncertain; perhaps free from magic constraints or allowed to speak on a given occasion.
- 6: The last sign on the tablet is DU instead of the expected LA.
- 7–8: The not too frequent expression *kiam kiam* has a temporal (“now and then”) or local (“here and there”) meaning. According to the dictionaries, however, it is possible that it may also refer to quantity (more or less) in cases like the present text.

- 11–15: These adverbs are exceedingly difficult to translate. They belong to the class of words that express subtle judgments of the speaker either on the truth of statements or on the relationship between them. Furthermore, most of them are unusual enough to prevent a definition of their meaning induced from contextual occurrences.
- 16: The last signs mean “broken” and indicate that the scribe was copying from a tablet damaged at this point. The Sumerian entry of this line is otherwise unknown, and there is no obvious reconstruction of the damaged Akkadian (see *AHw*, p. 868 s.v. *pišru*).
- 21–23: Sumerian does not seem to have a direct affirmative expression; only some letters use *an-na*, possibly a loanword from Akkadian, as in *tukum-bi lugal-mu an-na-kam*, “if my lord is agreeable” (lit.: “if my lord is of yes”; cf. M. Civil, *The Farmer’s Instructions: A Sumerian Agricultural Manual*, *AuOr* suppl. 5 [1994], p. 182). Instead it uses circumlocutions, three of which appear here in the left column: *al-dím*, “it is made (this way),” *ḥé-àm*, “let it be so!” and *na-nam na-nam*, “is it not so? is it not so?”

Reverse

- 31: The Sumerian of l. 31 is questionable. One would expect *še-ga*; is the *ga* of the tablet the volitive prefix *ga-*? The second term of the Akkadian translation is doubtful; the first sign is ŠÁR, despite the reading UB in *MSL* 5, p. 198. Is this term simply an otherwise unattested interjection?
- 35 ff.: These entries contain Sumerian words that do not literally mean “two.” The one in l. 35 is best translated “besides,” and it is derived from the verb *tak₄*, “to leave aside.” The following one, *an-ga-àm*, is the conjunctive particle “and also” or “furthermore,” with *in-ga*, “and” followed by the emphatic *àm*, “it is.” The Akkadian ll. 37–38 contain a scribal mistake. The verbs *dah* and *peš* mean “to do a second time” and “to do a third time,” respectively; they are used, for instance, in the introductory part of letters, after the main clause “say to him” frequently followed by *ù-na-dè-dah*, “repeat to him,” and *ù-na-dè-peš*, “repeat to him for the third time.” The error is a confusion due to the way the scribes used “ditto” on lexical tablets; when the Akkadian translation is the same for several successive lines, they either repeat the sign for “two” as many times as needed or they use successive numbers: 2, 3, 4, etc. The scribe of the present tablet used the first system in ll. 21–23, but in ll. 35 ff. he seems to have used the second one. The 3 in l. 37 is correct (=*šanû*) if he is using the second model, incorrect if it is taken as 3 being a translation of *dah-he*. In any case l. 38 is incorrect; it should be 3 or *sullušu*.
- 41–47: These lines contain a curious numerical system that uses as a base *peš* = 3, and *bal* and *gi₄* both = 1. A parallel lexical passage is Antagal C 52–60 (*MSL* 17, 196–97). It appears, slightly modified, in the Old Babylonian mythical tale “Enki and Ninhursanga,” and in one Kuyunjik incantation (W. G. Lambert, review of O. R. Gurney and P. Hulin, *The Sultantepe Tablets 2* [London 1964], in *JSS* 14 [1969], pp. 242–47; R. Borger, “Einige Texte religiösen Inhalts,” *Or* 54 [1985], pp. 22–25).

No. 62

Fragment of the Weidner God List

W. G. Lambert

62.

MMA 86.11.357

Plate 80

H. 60 mm W. 70 mm Th. 25 mm

Obverse/Reverse(?)

Right Column

- 1'. ^dKa[b-ta]
- 2'. ^dNin-si₄-[an-na]
- 3'. ^dNin-íld[u-ma]
- 4'. ^dGiš.BIL.SAG.MES
- 5'. ^dWe-er-an-na
- 6'. ^dA-nu-ni-tum
- 7'. ^dLugal-si
- 8'. ^dImin-bi
- 9'. ^d{AN}maš-tab-ba

Other Side

(not inscribed)

Remarks

There are remains of two columns on the one inscribed surviving side of this tablet fragment. The only legible traces of the left-hand column, . . .] *ga-mil* and . . .] *x-ra-an*, have not been identified. The traces in the other column cannot be reconciled with any part of the now completely preserved Weidner List and must therefore be something else; probably this is part of an exercise tablet. The only escape from this conclusion would involve taking the traces as remains of a colophon in the last column of the complete tablet, thereby making what is left a reverse piece. Although first attested on Old Babylonian tablets, the Weidner List became the most popular list of gods' names in Late Babylonian times, and it was used especially for scribal exercises. A recent edition based on exercise tablets from Babylon is provided by Cavigneaux, *Textes scolaires*, pp. 79–99. The piece described here covers ll. 198–207 of Cavigneaux's reconstruction but lacks his l. 201. The only reading of interest occurs in l. 203, where, for Wer (^dWe-er) of the other copies, ^dWe-er-an-na occurs. Appropriately, Wer follows the preceding line, "Gilgameš," since in the Old Babylonian Gilgamesh Epic Wer appointed Huwawa guardian of the cedar forest (A. R. George, *The Babylonian Gilgamesh Epic* [Oxford, 2003], pp. 198–99, col. iii 131–34; see A. Pohl, "Personalnachrichten," *OrNS* 25 [1956], p. 273 n. 1).

Nos. 63–64

Akkadian Synonym Lists: *Malku* = *šarru*

Anne D. Kilmer, Daniel A. Foxvog, John W. Carnahan

Introduction

Text Nos. 63 (MMA 86.11.371A–E) and 64 (MMA 86.11.377A) belong to the Akkadian synonym list series known (after the first line of its first tablet) as *Malku* = *šarru*, “king.” Text No. 63 belongs to the third tablet of the nine(?) -tablet series and is of Seleucid date; text No. 64 belongs to the fifth tablet and is from the Neo-Assyrian period.

MMA 86.11.371A–E is one of fourteen copies of Tablet 3 of the nine(?) -tablet series. The other copies are from Ashur (one), Nineveh (six), Nimrud (one), Kish (two), and Neo-Babylonian Uruk (one); two texts are Neo- or Late Babylonian but of unknown provenance.

The first line of *Malku* = *šarru* 3 is not preserved on the Metropolitan Museum tablet, but it is known from two other exemplars to be *sūlātu* = *tāḥāzu* (battle). The subject matter of Tablet 3 is ordered as follows:

battle

weapons

armor

kissing

sexual intercourse

sleeping

night

dream

waking

sweetness

hierodules

containers

plows

head, forefront

interrogative expressions

temporal expressions

personal pronouns

indefinite pronouns

adverbial phrases and other expressions

excrement and urine

temporal expressions

favorable and unfavorable days

sabbath

temporal expressions

weather

cold

ice/icestorms

heat

winds

evil

cardinal points

storm

heat

secrecy

offerings

Selected Bibliography

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A. D. Kilmer, “The First Tablet of *malku = šarru* Together with its Explicit Version,” *JAOS* 83 (1963), pp. 421–46

idem, “Additions and Corrections: The First Tablet of ‘*malku = šarru*’ (*JAOS* 83, 4),” *JAOS* 85 (1965), p. 208

W. von Soden, “Lexikalisches Archiv: Die akkadische Synonymenliste ‘D’,” *ZA* 43 (1936), pp. 233–50

idem, “Leistung und Grenze sumerischer und babylonisher Wissenschaft,” *Die Welt als Geschichte* 2 (1936), pp. 437–43

idem, *Die Lexikalischen Tafelserien der Babylonier und Assyrer in den Berliner Museen 2: Die akkadischen Synonymenlisten* (Berlin, 1933)

R. C. Thompson, *CT* 18

H. Zimmern, “Zur Herstellung der grossen babylonischen Götterliste An = (ilu) Anum,” *Berichte über die Verhandlungen der königliche sächsischen Gesellschaft der Wissenschaften zu Leipzig* 63/4 (Leipzig, 1911), pp. 124ff.

63.

MMA 86.11.371A (+) MMA 86.11.371B
+ MMA 86.11.371C (+) MMA 86.11.371D
(+) MMA 86.11.371E

Plates 81, 82, 83, 84

H. 90 mm	W. 107 mm	Th. 43 mm (MMA 86.11.371A)
H. 111 mm	W. 96 mm	Th. 45 mm (MMA 86.11.371B + 86.11.371C)
H. 14 mm	W. 37 mm	Th. 17 mm (MMA 86.11.371D)
H. 33 mm	W. 27 mm	Th. 10 mm (MMA 86.11.371E)

Akkadian Synonym List: *Malku* = *šarru*, Tablet 3
Reign of Seleucus

Obverse

Column i, Fragment A

	Subcolumn i (beginning broken)	Subcolumn ii	
5.	[šá-áš-mu]	[qab]-lu	battle
6.	[tu-qu-un-tú]	[ṣa-a]l-tum	fray
7.	[nam-ṣa-ru]	[ar]-ri	knife/dagger
8.	[a-ri-ru]	MIN	ditto
9.	[lab-bi-bu]	MIN	ditto
10.	[mar-qa-an-tu]	MIN	ditto
11.	[ma-ki-lu]	MIN	ditto
12.	[mul-mul-lu]	[ṣil]- ¹ ta ¹ -ḥu	arrow
13.	[uṣ-ṣu]	[MI]N	[ditto]
14.	[kak-su-u]	[MI]N	[ditto]
15.	[e-lam-ku-u]	[MI]N	[ditto]
16.	[ṣu-ku-du]	[MIN]	[ditto]
17.	[til-pa-nu]	[q]a- ¹ áš-tum ¹	bow
18.	[a-rik-tum]	[MIN] (break)	[ditto]

Continuation of Column i, Fragments B + C

41.	[šá-ḥa-tu]	[re-ḥu]- ¹ ū	inseminate
42.	[la-ma-du]	[n]a-ku	copulate
43.	[ga-ra-ṣu]	[MIN]	[ditto]
44.	(does not exist on MMA tablet)		
45.	[ba-a-tu]	[ú-t]u-lu	sleep, lie down
46.	[ṣur-bu-bu]	[MIN]	[ditto]
	(rest of column broken)		

Column ii, Fragment A

(beginning broken)		
74. {i-n}a(?) šu- ¹ u ¹ -[ti]	[i-na mi(?)-ni]	why
75. 'al(?) ¹ -mi-in mìn	[za-mar]	instantly
76. hu-ri	'MIN ¹	ditto
77. sur-ra	'MIN ¹	ditto
78. si-bit 'ap-pi ¹	'MIN ¹	ditto
79. ki-in-'ni-ka ¹ -a	'MIN ¹	ditto
80. A.HI.AŠ ^{lu-ú}	'MIN ¹	ditto
81. ar-de-eš diš	'ar ¹ -[hiš]	quickly
82. ah-ra-a-tum	dar-k[a-a-tum]	posterity
83. dír-ka-a-tum	ah-ra-[a-tum]	posterity
84. (does not exist on MMA tablet)		
85. (does not exist on MMA tablet)		
86. ah-rat u ₄ -mu	ana ár-kát [u ₄ -mu]	future/later [time]
87. ma-ti-ma	MIN	ditto
88. ul-lu-tiš	i-na-a{n-na}(?)	now
89. la ma-tar	MIN	ditto
90. [l]u-ma-an man	MIN	ditto
91. [a-ḥ]a-am-mu	ṣ[ur(?)-ri(?)]	moreover
92. [n]a-[mu-u]n-[d]u	i[š-tu . . .]	(an adverbial expression)
93. [an-nu]	a[n-na-nu-um]	here
	(break)	

Continuation of Column ii, Fragment B

110. [tu-ša-a-ma]	[ki-šá-a]-'ma ¹	evidently
111. [mi-in-su]	[MIN]	[ditto]
112. [pi-qa-a-ma]	[MIN]	[ditto]
113. 'ap-pu ¹ -[un-na]	[MIN]	ditto
114. mi-i[n-su]	[am-mi-i]-ni	why
115. ul-[la]	[mi-in-s]u	for what reason
116. (does not exist on MMA tablet)		
116a. ul-[la ¹	[ul(?)l]a(?)-'ma ¹	some other time(?)
117. 'ki-šá-a-ma ¹	[.] x	...
118. 'e-zu ¹ -[ub]	[la te-me-ek-ki]	leave it/don't bother
119. [m]a-š[iš-tum]	[MIN]	ditto
	(rest of column broken)	

Reverse

Column iii, Fragments B + C

(beginning broken)

157.	[s]a- ^r har u ₄ ¹ -[me]	[li-la-a-tum]	evening
158.	tam- <i>hu</i> - ^r ú ¹	[MIN]	ditto
159.	ša-an-ša-la	[iš-tu UD.3.K]ÁM	day before yesterday
160.	'am ¹ -ša-la	[mu-šam-m]a	last evening
161.	u ₄ -mu gu-nu-ru-ú	'ti ¹ -[ma-l]i	yesterday
162.	ti-ma-li	mu-[šam-ma]	yesterday
163.	u ₄ -mu gu-dil-lu-ú	iš-t[én] 'u ₄ -mu ¹	tomorrow/day after tomorrow
164.	ul-lu-tiš	MIN	day after tomorrow
165.	iš-tu ul-la-nu	iš-tu ša-a- ^r tum ¹	from days of old
166.	še-er-tum	ka-ša-a-tum	morning
167.	ra-ba-šum	mu-uš-la-lu	afternoon/siesta time
168.	'ka-ra ¹ -ru-ú	MIN	ditto
169.	[a]-ši-t[um]	[MIN]	ditto
170.	[šá]- ^r ar ¹ -[bu]	[ku-uš-šu]	cold (time)
171.	'hal ¹ -pu-ú	[MIN]	ditto
172.	še-šu(!) tablet: RU-ú	'MIN ¹	ditto
173.	a-ra-mu	[MIN]	ditto
174.	e-ri-ia-a-tum	[MIN]	ditto
175.	hal-pu-ú	[tak-ša-a-tú]	frost
176.	hal-pu-ú	[šu-ri-pu]	ice
177.	hi-mit- ^r tum ¹	[MIN]	ditto
178.	šal-šá-x(?)[. .]	[MIN]	ditto
179.	'bi-bi-i ¹ -[tum](?)	[šu-ru-up-pu-u]	frost (break)

Continuation of Column iii, Fragment A

184.	m[e-h]u-[ú]	[MIN = (šāru)]	wind/breeze
185.	še- <i>hu</i> -[ú]	[MIN]	ditto
186.	šá-par-ziq- ^r qu ¹	MIN	ditto
187.	(does not exist on MMA tablet)		
188.	an-qúl-lum	MIN	ditto
189.	an-qúl-lum	MIN [lem-nu]	evil wind
190.	an-qúl-lum	'MIN ¹ [kab-bu]	scorching wind
191.	ziq-ziq-qa	b[il(?)-la(?)]	melting(?) wind
192a.	im-sùh(!)-[hum]	[ša-ar e-ši-ti]	wind of confusion
193a.	im-MIN- <i>h</i> [um]	[MIN le-mu-ut-tum]	wind of misfortune
194a.	im-MIN-[hum]	[MIN mit-hur-tum]	wind of conflict
	(rest of column broken)		

Reverse

Column iv, Fragment B

- (beginning broken)
- | | | |
|---------|-----------------|-------------------------------|
| 224. | [.....] | [.....] ^{xmeš} |
| 225. | [.....] | [.....] |
| 226. | [.....] | [.....] |
| 227. | [.....] | [.....] x |
| 228. | [.....] | [.....-t]um(?) |
| 229. | [.....] | [.....-b]i(?)/-g]u(?) |
| 230. | [.....] | [.....] |
| 231. | [.....] | [.....] DINGIR ^{MEŠ} |
| 232. | [.....] | [.....] |
| 233. | [.....] | [.....] D]UB |
| 234–37. | (not preserved) | |
| 238. | [.....] | [.....] UD(?) |
- (traces of seven more lines)

Colophon

Column iv, Fragments D, E, and A (provisional reading)

- | | | |
|-----|---------------|--|
| 1'. | ...} x x [... | |
|-----|---------------|--|
-
- | | | |
|-------|--|--|
| D 2'. | [kima labirišu šatirma b]a-ri IM.DUB ¹ [... | |
| | (break) | |
- | | | |
|-------|-------------------------------|--|
| E 1'. | ...} x x [... | |
| 2'. | ... x]x ^{ki} TA [... | |
| 3'. | ...} x ^{meš} [... | |
-
- | | | |
|-----|--------------------------------------|--|
| 4'. | ...} x [... | |
| 5'. | ...} x x ¹ Šal-la(?) [... | |
| 6'. | ...} S{AG ... | |
- (break)
- | | | |
|-------|--|--|
| A 1'. | ... ¹ Se-lu-]ku ¹ LUGAL KUR ¹ .KUR ^{meš} | |
|-------|--|--|

Provisional Translation of Colophon

- [...]
- D 1'. [written in accordance with the original and checked; tablet of Mr. [...]
- (break)
- E 1'–4'. (too damaged for translation)
- 5'. ...] Mr. Šal-la-[...] (?)

6'. [...]

(break)

A 1'. . . Seleucus, king of the lands

Notes

Restorations and line numbering follow the new edition of *Malku = šarru* by A. Kilmer, D. Foxvog, and J. Carnahan (in preparation).

The colophon, partially preserved on fragments D, E, and A, can be reconstructed partly on the basis of comparison with other Seleucid period colophons (see Hunger, *Kolophone*, pp. 37–40). An attempt to join fragment E to A failed because collation revealed that the last visible sign on E, the S[AG] sign, was written in a smaller hand than the -lu]-ku of fragment A.

64.

MMA 86.11.377A

Plate 85

H. 56 mm W. 42 mm Th. 26 mm

Obverse

Subcolumn i	Subcolumn ii
(beginning broken)	
1'. [.....]x	MIN
2'. [.....] x	[....]
3'. [.....] x x	[....]
(rest of obverse broken)	

Akkadian Synonym List: *Malku = šarru*, Tablet 5

Late 1st millennium

Reverse

(beginning of reverse broken)

168a. [a]r- ^r qu-ú ¹	M[IN] (= <i>hu-ra-ṣu</i>)	gold
169a. [<i>pa-ṣa</i>]l-la	M[IN]	ditto
170. [<i>s</i>]a-i-du	M[IN]	ditto
170a. [<i>l</i>]i(?)-iq-tum	M[IN]	ditto
171. [<i>ṣa</i>]-ri- ^r i ¹	M[IN]	ditto
172. ^r ma ¹ -gu-ú	[MIN]	ditto
173. [m]e-e-su	M[IN]	ditto
174. [d]a(?)al-pu	M[IN]	ditto
175. [<i>h</i>]u-uš-šu-ú	M[IN]	ditto
176. [ru]-uš-šu-ú	M[IN]	ditto
177. [x-x]x KUR-šú	M[IN]	ditto
178. [za(?)a]l(?)-ḥi	M[IN SU.BIR ₄ ^{ki}]	ditto, (in) Subarean

Notes

Restorations and line numbering follow the new edition of *Malku = šarru* by A. Kilmer, D. Foxvog, and J. Carnahan (in preparation).

Obverse

2': The placement of this fragment of the obverse is not clear. The preserved signs in ll. 2'-3' may duplicate *Malku = šarru* V 26-27:

- | | | |
|-----|---|--------------|
| 26. | [<i>gu-uk</i>]- <i>kal</i> (!) (tablet: é/kid)-[<i>lum</i>] [MIN] | (male sheep) |
| 27. | [<i>pa-s</i>] <i>i-l</i> [<i>um</i>] | [MIN] |

Reverse

175-176: These two lines restore a break in the other copies.

177: This obscure line occurs only on this fragment.

178: Restored after Explicit *Malku*, *šaššu = hurāšu*, l. 16.

Remarks

This tablet is one of seven known copies of Tablet 5 of the nine(?)-tablet series *Malku = šarru*. Two are from Ashur, three from Nineveh, and one from Nimrud. The provenance of this fragment is unknown, but it is written in Neo-Assyrian script. The first line of *Malku = šarru* V is not preserved on the Metropolitan Museum tablet, but the line is known (from two exemplars) to be *šummannu = nardappu*, “tethering-rope/bridle.”

Because of the many breaks in Tablet 5, the sequence of topics is difficult to ascertain. On the other copies the subject matter, animals, which is on the obverse of the MMA fragment, is preceded by terms for animal anatomy and types of herds, and is followed by terms for various kinds of quadrupeds (ewe, foal, donkey, wolf, gazelle, bull, bear, mouse, stag, lion, etc.) as well as by terms for various other types of creatures (snake, scorpion, turtle, ant, etc.). The context of the reverse of the Metropolitan Museum fragment is more difficult because of breaks in the other tablets. There, “gold” is preceded by terms for praise and adoration and followed (presumably) by terms for precious stones (lapis-lazuli, etc.).

Nos. 65–66

Late Babylonian School Exercise Tablets

Petra D. Gesche

Introduction

The two unusual school texts (MMA 86.11.362 and MMA 86.11.361) published in this section belong to a small group of Late Babylonian exercise tablets whose appearance differs from the common type of large square tablets written by pupils in their first stage of scribal education. They are smaller than the latter and have only one column on each side. The obverse is decorated with a border of *winkelhaken*, and the text is divided into sections by rows of *winkelhaken* instead of ruled lines. Division by *winkelhaken* is a widespread phenomenon in several groups of exercise tablets. On the other hand decorative borders occur rarely and only in colophons from the temple of Nabû *ša harê* and similar texts. In the present texts the colophons are not decorated, except in one case (BM 47882, see pp. 264–65). Highly unusually for school texts, all these tablets are turned from left to right, like the pages of a book. The group identified so far includes the texts MMA 86.11.361, of which only the obverse is preserved, MMA 86.11.362, BM 32620+ (Gesche, *Schulunterricht*, pp. 222–24), and BM 47882 (see p. 264). The provenance of these texts is Babylon, as far as can be concluded from the colophons. The well-known texts EAH 197 and EAH 198 + EAH 200,¹ which originate from Borsippa, are related to the Metropolitan Museum texts, although more columns of the obverse appear in an atypical order.

BM 32620+ is the simplest example. The obverse lists the incipits of all the texts that are written on the obverse of beginners' school texts (with the exception of two columns containing only the sign BAD and the sign A, respectively).² However, this writer is not aware of any other tablets with a similar arrangement. The two Metropolitan Museum tablets seem to list the incipits of more advanced texts that were taught in Late Babylonian schools. Unfortunately, in most cases it is not possible to identify those compositions, and their contents remain obscure. The obverse of BM 47882 is similar to those of the Metropolitan Museum texts, but, regrettably, it is badly broken.

All these tablets have extensive colophons on the reverse, which start with a prayer to Nabû that might be a quotation of another text. This is followed by wishes for the well-being of the scribe and his family, and a dedication to a particular temple of Nabû.

In general, the colophons written on Late Babylonian exercise tablets are different from those edited by H. Hunger, which were written for use in a library.³ The present texts were written as dedications to Nabû in order to represent the scribe before the god. No very sophisticated writings occur in the colophons of school texts such as occur in other colophons, but nevertheless a much more advanced scribe was needed to write the colophon than the scribe who wrote the exercise on the same tablet. Thus most probably the teacher wrote the colophon for his pupils. That he had to write the same text several times for different pupils would explain that the mistakes, such as the omission of words, were caused by carelessness. One of the colophons of the Nabû *ša harê* texts⁴ even mentions two scribes, but the poor preservation of the tablet does not allow us to decide whether it refers to the pupil and the person who wrote the colophon or to two pupils who wrote the exercises. The fact that some of the colophons are written in the first person singular instead of the third person singular does not necessarily mean that they were written by the

pupils themselves, since the teacher might still have done it for them. But there are examples of colophons repeated on the tablet.⁵ In those cases the pupil probably copied the text in order to learn how to write it.

It is helpful for the understanding of this group of texts to examine two related British Museum texts (see Remarks below).

This author wishes to thank Dr. Irving L. Finkel for transferring publication of these texts to this writer. He also drew attention to the then unpublished text BM 32620+, read this manuscript, and discussed some of the problems with this writer. A debt of gratitude is also owed to Dr. A. R. George for his careful reading of the manuscript. The British Museum tablets edited in this study are published with the kind permission of the Trustees of the British Museum.

1. The obverse of these texts was first edited in J. A. Maynard, "A Neo-Babylonian Grammatical School Text," *JSOR* 3 (1919), pp. 65–69. For the reverse of EAH 197 see D. G. Snell, "A Neo-Babylonian Colophon," *RA* 88 (1994), pp. 59–63. For an improved edition of the colophon of EAH 197 see E. Frahm, "Ton vom Ton des Heiligen Hügels," *NABU* (1995), pp. 8–9; P. D. Gesche, "Ton vom Ton Heiligen Hügels—woher stammt der Ton wirklich?" *NABU* (1995), pp. 58–59; and A. Cavigneaux, "Un Colophon de Type *Nabû ša Harê*," *Acta Sum.* 18 (1996), pp. 23–29. For the obverse see also MSL 5, p. 4.
2. For some published examples see Cavigneaux, *Textes scolaires*, and compare also EAH 197 and EAH 198+.
3. Hunger, *Kolophone*.
4. Cavigneaux, *Textes scolaires*, p. 42 (79.B.1/21).
5. Cavigneaux, *Textes scolaires*, p. 38 referring to 79.B.1/4, p. 39. See also Gesche, *Schulunterricht*, p. 156, with note 582.

65.

MMA 86.11.362

Plates 86, 87

H. 80 mm W. 65 mm Th. 30 mm

School Exercise Tablet

Later 1st millennium (Babylon)

Obverse

(beginning of obverse broken)

- 1'. . .] ¹UR¹ ka [. . .
- 2'. . .] x x MUL ^{giš}TUKUL x [x x (x)]
- 3'. . .] x muš ^{na4}KA.GI.NA [x x (x)]

- 4'. . . E]N.LÍL^{ki} kur a siskur ^{lú}SIPA KÁ(?). [DINGIR.RA^{ki}(?)]
- 5'. . . tu]m(?) la a rab e šum ma nu x [(x)] x [. . .

- 6'. . . d]ag gišgal ku me al al šu gar
- 7'. . .] x si um diri siskur ma NU[MU]N ^ūKUR.RA
- 8'. . . A]N.USAN diš a diš ^dlid-diš ^dhatta(PA)(?)

- 9'. . . šu]m(?) 1 gan an a u um
- 10'. . .] x gišgal ^dLugal-bàn-[d]a

- 11'. . . šá(?) -ru(?) -ri ^dUTU giš-nu₁₁

- 12'. . . si]g₇-alam *nab-ni-tum*
(rest of obverse broken)

Reverse

(beginning of reverse broken)

- 1'. *kiš-šat* x [. . .
2'. *ú-taq-qu-¹ú* [. . .
3'. *mar(A) ¹Aḥu(ŠEŠ)-ba-nu* [x] x [. . .
4'. *ana arāk* (GÍD(?)(written over erasure).DA) *ūmī* (*U₄*^{meš})-*šú petē*(BAD)^e *uznī(GEŠTU^{II})*-*šú ana ḫu-ub lib-bi-šú ana tu-ub* <x> *šīri(UZU)-[šú* . . .
5'. *ana kašād*(KUR)(written over erasure) *ernettī(Ù.MA)-šú* x (erasure)
6'. *ana še-be-e lit-tu-tu* ù <*kimilti*(DIB)>-*tī ilī*(DINGIR^{meš}) u *Išt[ari^d1[5] ana pašāri]*
7'. <*tiđu*(IM)> *iš-tu ki-di ašri*(KI) *elli(KÙ) ik-ri-ṣa-am tuppū*(IM.DUB) *i[š]-tur-ma]*
8'. <*ina*> *bit(É) ^dNabū(^dNÀ) šá nikkassi(NÍG.KA₉) bit(É) bēlūtī(EN)*ⁱⁱ-*šú rabītu(GAL)*ⁱⁱ *ana GÚ ana ka-n[ak-ki]*
9'. *É-sag-íl ú-kin tuppū*(IM.DUB) *ana erēbi(KU₄)-ku ṣa-b[at abbūti u qībi]*
10'. *damiqti(SIG₅)ⁱⁱ šá ¹Ēdu(AŠ?)-ēṭir(KAR)^{ir} māri(A) šá ^{1d}Bēl(^dEN)-balāssu(TIN)-su-iqbī(E) mār(A)* [. . .
11'. at tat ka ak ka(?) x *ri-ṣá-a uš* [. . .
12'. *uzna(GEŠTU^{II}) rapašti(DAGAL)ⁱⁱ ana(!) šá-ka-a-ni-ma(?) ba ḫu* x [. . .
13'. DUMU *šá ki-ma ne(?) šá-a-tú* IM.DUB-¹*šú(?)¹* [. . .
14'. *li-ṣe-rib bit(É)-tuk-ku*
(traces of erased signs)

Translation

Obverse

(see Notes below)

Reverse

- 1'. all . . . [. . .
2'. they pay heed [. . .
3'. son of Aḥu-bani . . . [. . .
4'. for granting him long life, for opening his ears, for his happiness, for his health, [. . .
5'. for the fulfillment of his wish,
6'. for enjoying long life, for [releasing] the anger of the god and god[dess].
7'. He pinched off <clay> from the open country, from a pure place; he wrote this tablet and
8'. placed it in the temple of Nabū-of-Accounting, the house of his great lordship, in the *gunnu* and the *kanakku*
9'. of Esagil. O tablet, when you go in, interce[de and pronounce]
10'. good things for Ēdu-ēṭir, the son of Bēl-balāssu-iqbī of the family of [. . .].
11'. . . [. . .
12'. to establish wide understanding and . . . [. . .
13'. the son who . . . his(?) tablet [. . .
14'. Let him cause to enter into your house.

Notes

Obverse

- 2': MUL gišGIGIR = *narkabtu*, the constellation Auriga.
- 3': Urra XVI 2: na₄ka-gi-na = šadānu, "hematite."
- 6': This line might be Sumerian. Maybe al al-šu-gar is written for al šu al-gar?
- 7': zēr nīnē, "seed of the *nīnū*-plant" (see R. C. Thompson, *A Dictionary of Assyrian Botany* [London, 1949]).
- 9': Following gan, the text may be amended to read ^dA-nu(!)-um, although the signs are clear and the divine name was frequently written in school texts, so that a mistake is hardly to be expected.
- 10': GIŠGAL is one of the logographic writings for *manzāzu*; cf. the expression in omens *manzāz* DN, "presence of a deity," but it is never written with this logogram in the present context.
- 11': "Sunlight(?), Šamaš/Utu, the light." There might be a connection with the entry in the god list AN = ^dAnum: ^dGIŠ.NU₁₁ = MIN (= ^dUTU) (CT 25, 25:8).
- 12': Quotations from the series sig₇-alam = *nabnītu* occur occasionally in school exercise texts (see MSL 16, pp. 7–8).

Reverse

A close parallel to the reverse of the present text is the colophon of EAH 197. That tablet is dedicated to Nabû of Borsippa(?), while our text mentions parts of Esagil. Similar passages are also to be found in colophons of the Nabû ša ḥarê texts, of which BM 77665+ (Gesche, *Schulunterricht*, pp. 650–52) is a good example (see also Cavigneaux, *Textes scolaires*, passim).

- 4': This line is written over an erasure and consequently is very difficult to read.
- 6': The emendation *ù* <DIB>-ti follows the parallels in the duplicates. *ki-mil-tu* is written in EAH 197 (see Hugo Radau, *Early Babylonian History down to the end of the Fourth Dynasty of Ur* [New York, 1900]). For the meaning of *ili* as one's personal god see *BWL*, p. 67.
- 7': The scribe has neglected to write *ti* at the beginning of this line, unless it is to be restored at the end of the previous line. As this expression is not completely preserved in any of the texts, the reading can be confirmed by comparing all duplicates:

MMA 86.11.362	<IM> iš-tu ki-di KI KÙ ik-ri-ṣa-am . . .
EAH 197	IM TA ¹ ki¹-di KI KÙ ik-ri-iṣ-ṣa-am-ma . . .
BM 32620+	IM iš-tu ki-di a-ṣa[r] e[l-lu] ik(!)-ri(!)-i[ṣ(!)-ṣa-am-ma . . .
BM 77665+	ti-i]d iš-tu ki-di aš-[ru] el-lu [. . . i]k-ri-ṣa-am-ma . . .

- 8': The name of the temple is known from Tintir IV 12 (George, *BTT*, pp. 58–59): é.giš.lá.an.ki = *bīt* ^dNabû ša *nikkassi*. It occurs in its Sumerian form in the texts from the excavations of the temple of Nabû ša ḥarê in Babylon (Cavigneaux, *Textes scolaires*, p. 42, 79.B.1/21, 6; p. 50, 79.B.1/59+, 10–11; p. 59, 79.B.1/102, 6; perhaps also p. 41, 79.B.1/11, 9; p. 56, 79.B.1/87, 10). See also George, *BTT*, p. 309, and Cavigneaux, *Textes scolaires*, p. 50. The temple name is also attested in BM 32620+ (see p. 262 below).

Both the *gunnu*, written GÚ here and in EAH 197, and the *kanakku* are found in the Nabû ša ḥarê texts. They seem to belong to the equipment of a temple, in this case of Esagil (see Cavigneaux, *Textes scolaires*, p. 38). The *gunnu* might be a container in which the tablets are brought into the temple, as it is sometimes written with the determinative DUG (ibid., p. 52, 79.B.1/67, 3'; p. 56, 79.B.1/87, 9; p. 69, 79.B.1/165, 4; p. 72, 79.B.1/189, 13'; and A. Cavigneaux, "Le temple de Nabû ša Harê: Rapport préliminaire sur les textes cunéiformes," *Sumer* 37 [1981], p. 124).

11': Cf. BM 47882:rev. 10' (see p. 264).

13': Cf. BM 47882:rev. 11' (see p. 264).

14': The same phrase occurs in BM 47882: rev. 12 *li-še-rib bīt(É)-[tuk-ku]* (see p. 264). The locative adverbial is attested in a similar expression in Lambert, *BWL*, p. 32 l. 62: *er-ru-ub bit(É)-uš-šu* and *passim*.

66.

MMA 86.11.361

Plate 88

H. 100 mm W. 98 mm Th. 42 mm

School Exercise Tablet

Later 1st millennium (Babylon)

Obverse/Reverse(?)

(beginning broken)

1'. [.....] x [...]

2'. [.....] x [...]

3'. [.....] x Á^{meš}-šú [k]a-lu-ú x [...]

4'. [.....] ^d[AMAR(?)].UTU ^t*iq-qu-úr(?)*^l lí(?) šú ud x [...]

5'. [^l*Ina-GIŠ.G*]E₆(?)-^dAMAR.UTU ^t*bu(?)*^l-*kúr* ^{ld}_U.GUR-*in-SÙH-K*[AR ...

6'. [.....] x ^t*be-lu*^l-*ti-ka a-na* UN^{meš} DAGAL^[meš]

7'. [.....] x na àm/šèg šU^{II}-*ka* DUB l[u ...

8'. [.....] x NUMUN-šú *tu-ub lib-bi-[šú* ...

9'. [.....] *sur]-riš i* x *i-na d[ub(?)* ...

10'. [.....] x šá x [...]

(remainder broken)

Translation

(This text is too fragmentary for translation. For translation of selected phrases see Notes below.)

Notes

3': [.....] his arms/strength ... [...]

5': [*Ina-ṣill*]i-Marduk, son of Nergal-in(a)-tēšî-[etir(?)].

bukru, as a word for son, is frequently attested in the Nabû *ša harê* texts and in other colophons.

6': *ana nišē rapšāte* is a common expression that occurs, for example, in prayers.

8': [. of(?)] his offspring, [his(?)] happiness . . .

Remarks to Text Nos. 65 and 66

It is helpful for understanding these tablets to include an edition of related texts—BM 32620+ unnumbered Rm and BM 47882—in the collections of the British Museum (see Gesche, *Schulunterricht*, pp. 222ff. and pp. 330f.).

BM 32620 + unnumbered Rm

School Exercise Tablet
Later 1st millennium [Babylon]

Obverse

Column i	Column ii	Column iii	Column iv
1. ¹ A ¹	[¹ x]	[¹ A]	¹ AN
2. ¹ SUR	[¹ [x]]	[¹ ZÀH]	[¹ DINGIR]
3. ¹ ŠUK	[¹ [x]]	[¹ AGAM]	[¹ NAB]
4. ^d A- ¹ nu ¹ -um	ur ₅ -ra	hu-bul-lum	
5. An- ¹ tum ¹	pú	bur-tum	
6. giš[TÚG]	[¹ tas ¹ -ka-ri-nu]		
7. gišGIŠI]MMAR	gi-šim-[ma-ru]		

Reverse

1. [x (x)] x aplu(A) šīru(MAH) šit-r[a-hu . . .]
2. [reš-tu]-ú ašarēdu(SAG.KAL) maḥ-ri x [. . .]
3. [x (x) ku]l(?)-lat gim-ri sa-niq [. . .]
4. [.] x x x x x [. . .] x x [. . .]
5. [x (x)] x x x Ú x [.^{me}]š^dÍ-gi-[gi . . .]
6. [.-šú ^{ld}Bēl(^dEN)-ibni(DÙ) mār(A) šá x [.] x šangē(^{lú}É.MAŠ) Ištar(^dINANNA) [. . .]
7. [ana balāt napšātī(Z)l]ⁱ-iá ana arāk(GÍ.DA) ūmī(U₄^m[eš])-iá ana šalām(?) zērī(NUM]UN)-iá ana petē(BAD uz(?)-^rni-iá¹)
8. [x (x)-i]á ana tu-ub lib-bi-iá ana ha-[sa-su UZU]-iá ana GUB.BA [išdī(SUHU]Š)-iá
9. [ana kunnu(G]IN) išdi(SUHUŠ) bīt(É) abī(AD)-iá ana lā(NU) bašē(GÁL)[^c muršī(GI]G)-iá ana lā(NU) bašē(GÁL)^e
10. [muruš inī(IG)l]^{II}-iá ana kašād(KUR)^{ad} ernetti(Ù.MA)-iá ana kašād(K[UR]^{ad}) ernetti(^lÙ¹.MA) bīt(É) abī(AD)-iá
11. [ana še-be]-e lit-tu-tu ù kimilti(DIB)ⁱ(!) ilī(DI[NGIR^{meš}] u] Ištar(^rd¹15) šá elī(UGU)-iá bašū(GÁL)ⁱⁱ
12. [ana pašārī] fidu(IM) iš-tu ki-di a-ša[r] e[l-lu] ik-ri-iş-[sa-am-ma]
13. [tuppu] áš-ṭur-ma ina É.gi[š.lá.an].^lki bīt(É)^l [^dNabū(^dNĀ) š]á nikkiassi(NÍG.K[A₉]) . . .]
14. [x (x)] ^rbīt(É)^l be-^rlu-ti¹-[šú rabiti] a-na g{u}-^lun¹-[nu(?)] . . .
15. [ana kanāk bābi] x ku [.] x ú-kin [. . .]

Translation

Obverse

(For a translation of selected phrases see Notes below.)

Reverse

1. [...] the exalted son, the magnificient . . .
 2. the foremost [prin]ce . . . [. . .]
 3. [. . .] . . . of everything, who controls [. . .]
 4. [. . .] . . . { . . .}
 5. [. . .] . . . [. . .] the Igigi [. . .]
 6. [. . .] . . . Bēl-ibni, the son of . . . [.] priest of Ištar [. . .]
 7. [for giving me heal]th, granting me long life, for the well-being of my offspring, for opening my ears
 8. [for] my [. . .], for my happiness, for remembering of my body, for establishing my foundation
 9. [for establishing] the foundation of my father's house, for absence of illness, for absence of
 10. [a disease of my eye]s, for fulfilling my wish, for fulfilling my father's wish,
 11. for enjoying long life, [for releasing] the anger of gods and goddess, which is against me,
 12. [. . .] I(?) pinched off clay from the open country, from a pure place,
 13. I wrote [the tablet] and I placed it in the É-gi[š-lá-an-ki], the temple [of Nabû]-of-Accounting,
 - 14-15. [. . .] the house of his great lordship for the *gunnu* [. . .] and the *kanakku* [. . .]. [O tablet]
 16. [intercede for me] and pronounce [good] things about me [. . .]

Notes

Obverse

Column i

- 3: Col. i = S^a signs 1–3; col. ii probably contains three signs from S^a close to the end of the list; col. iii = S^b A signs [1]–3; col. iv = S^b B signs 1–3 (see MSL 3).

4–5: Col. i = Weidner god list 1–2 (see Cavigneaux, *Textes scolaires*, p. 82); col. ii = Urra I 1 and Urra II 1.

6: Urra III 1 (see text No. 60).

7: Urra III 280. Urra Tablet 3 is very rarely written on beginners' school exercise tablets, because it belongs to the second stage of education. A general division of the list into two parts in which the second division starts exactly with l. 280 cannot be verified, although it is obvious from other texts that the lists are divided into small paragraphs in order to give the pupil a text of adequate length to learn.

Reverse

- 1–3: A longer prayer to Nabû is expected at the beginning of colophons; see EAH 197, where an independently known prayer is quoted. A close parallel is the colophon of BM 68403 (W. G. Lambert, “Nabû Hymns on Cylinders,” in B. Hruška and G. Komoróczy, eds., *Festschrift Lubor Matouš* 2 [Budapest, 1978], pp. 110–

11). The traces fit the usual epithets of Nabû: *aplu širu* occurs for instance in *BBSI* no. 11, col. iii 6; *šitrâhu* in I R 35 2:1; *rubû ašarêdu* in *BMS* 22:obv. 1. Another possible restoration for this line is . . .] ú-šaq-qal . . . For *sâniq* in l. 3 see *sâniq mitkurti*, in W. G. Lambert, “Two Texts from the Early Part of the Reign of Ashurbanipal,” *AfO* 18 (1958), p. 387, l. 24; Cavigneaux, *Textes scolaires*, p. 53, 79.B.1/75, l. 4; and for *sâniq kišsat šamê u erseti* (see Lambert, *BWL* [Oxford, 1960], p. 114, l. 53).

- 8: For the restoration *ana ha-[sa-su UZU]-iá* cf. BM 68403 12, published by W. G. Lambert in “Nabû Hymns on Cylinders,” in B. Hruška and G. Komoróczy, eds., *Festschrift Lubor Matouš* 2 (Budapest, 1978), pp. 18–103, copy on pp. 110–11; and BM 113241 (see Gesche, *Schulunterricht*, pp. 163–64 for the translation of the colophon; see also W. R. Mayer, “Ein Hymnus auf Ninurta als Helfer in der Not,” *OrNS* 61 [1992], p. 19).

BM 47882

School Exercise Tablet
Later 1st millennium [Babylon]

Obverse(?)

(traces of a border of *winkelhaken*)

- 1'. [.] x a
 2'. [.] x
 3'. [.] x ku
 4'. [.] k]iš apin pi
 5'. [.] x um
 6'. [.] i]m(?)-ri
 7'. [.] x x
 8'. [.] x [. . .]

Reverse(?)

- 1'. 'ana(?)¹ x [. . .
 2'. ana pa-x [. . .
 3'. ana kunnu(GIN) SU[HUŠ] . . .
 4'. ana kašād(KUR)^{ād} ernetti(Ù.M[A]) . . .
 5'. ù kimilti(DIB)^{ti} ilī(DINGIR)^{meš} Išta[r(1[5(?)])] . . .
 6'. tuppu(IM.DUB) áš-ṣur-ma 'ana¹(?) [. . .
 7'. ana gu-un ana ka-nak [. . .
 8'. tuppu(IM.DUB) ina erēbi(^rKU₄¹)-k[a . . .
 9'. šá ^ld Bēl(^dEN)-apla(A)-iddina(MU) mār(A) [. . .
 10'. liršāt(TUKU)^a rēma(ARHUŠ) ūmī(U₄^{meš}) [. . .
 11'. ù ^lú DUMU^{meš} šá x [. . .
 12'. li-še-rib bīt(É)-[tuk-ku]

Translation

Obverse

(too fragmentary for translation)

Reverse

- 1'. for [...]
- 2'. for [...]
- 3'. for establishing my foundation [...]
- 4'. for fulfilling [my(?)] wish [...]
- 5'. for releasing the anger of the god and goddess [...]
- 6'. I wrote the tablet and to(?) [...]
- 7'. for the *gunnu*, for the *kanakku* [...]
- 8'. O tablet, when you enter [...]
- 9'. for Bēl-apla-iddina, the son of [...]
- 10'. may he have mercy on me, the days [...]
- 11'. and the sons, who [...]
- 12'. let him cause to enter [into your] house.

Notes

Reverse

1'-12': The colophon is written on the flatter side of the tablet.

10': Cf. Maul, "Wenn der Held," p. 316, C rev. 3: *reme-nu-ú dNÀ TUKU-a ARHUS*.

No. 67

Inscription on a Clay Ball

W. G. Lambert

67.

MMA 86.11.336

Plate 89

H. 34 mm Circum. 106 mm

Inscription on a Clay Ball

Later 1st millennium

1ff. ^dŠamšu^{šú}-bēl-ši-mat-kiššati(šú) u ¹Kaš(?)-šu(?)-ú-a a-na pa-ni maš(?) šú(?) maš(?) a-mat ^dBēl DI-šú-nu a an x x
x (x) di ú ki-i i-la-ku/su-ú bab-ba-nu-ú-šú-nu itti <a>-ha-meš i-né-ep-šú ^dŠamaš liš-pu-ru

Notes

1ff.: Šamšu-bēl-šimāt-kiššati and Kaššū'a are possible personal names, although they are not noted by the writer elsewhere. After *ana pāni* a third personal name could be expected, but if so the immediately following sign must also be emended. The name could be gotten by emending the following *maš(?)* to *ina*: ¹Ina-a-mat-^dBēl; cf. ¹Ina-qí-bi-^dBēl (ABL 475 6). Further sense could be arrived at by reading DI-šú-nu as *dīn-šú-nu* followed by a verb. *babbanūšunu* is difficult since *babbanū* is an adjective and should not have a suffix unless used as a noun, which is unlikely. “Like fishes” should be written *ki-i ku₆^{meš}*, so the insertion of a- is adopted to give *itti ahāmeš*, which can go with the following *innepšu*.

This is hardly literary material, but it may be the same as apparent anecdotes about practical matters for scribes that appear at the very end of some Late Babylonian multicolumn exercise tablets (see Gesche, *Schulunterricht*, pp. 147–49).

Remarks

As far as this writer knows, this kind of inscription is peculiar to the Late Babylonian period. The writing progresses around and downward so that from the perspective of the reader there is one continuous line. Other examples are in the British Museum (BM 53771, 83052) and in the Harvard Semitic Museum. The writing is always difficult to read, which suggests that this is some kind of writing exercise. An expert scribe should be able to write legibly even on a curving surface. The present writer has been unable to understand this specimen sufficiently to offer a translation but hopes that most of the signs are identified correctly.

An inclusion, 1.2 cm wide, is found in the top surface of the ball. Material extruding from the hole has been identified as bone or ivory. The original shape and function of the material are unknown.

No. 68

Measurements of the Interior of the E-sagil Temple

A. R. George

Introduction

A small number of cuneiform texts has survived that deal with the measurements of the religious buildings of ancient Mesopotamia. The most famous of these is undoubtedly the E-sagil Tablet from Seleucid Uruk, which gives measurements of two courtyards of E-sagil, the temple in Babylon of Marduk, the city's patron deity, and various dimensions of E-temen-anki, the ziqqurrat or temple-tower of Babylon.¹ Because of the importance of its content, particularly for those wishing to reconstruct the plan of the ziqqurrat, the E-sagil Tablet has been the subject of an abundant literature from the time of its discovery by George Smith.² A tablet that adopts a different approach to the measurement of E-sagil is VAT 9961 + 10335.³ That Neo-Assyrian tablet from Ashur purports to give the interior dimensions of the rooms and courts of E-sagil as they appear in two cross-sections of the building, extending from wall to wall. The central part of the tablet is considerably broken, but the text ends with a section that deals with E-zida, the temple of the god Nabû at Borsippa, which concludes by stating its circumference. Different again is a Late Babylonian tablet from Uruk that records the measurements in brick-lengths of some of the interior walls of E-sagil, broken down into architectural features such as pilaster and recess.⁴

Other rather shorter examples of such texts are concerned with buildings other than Marduk's great cult-center. Three Old Babylonian tablets from Mari, located on the middle Euphrates, each give a few brief dimensions of an individual local sanctuary, namely E-mete-nune of Teshub, the Hurrian weather god, at Kahat; the temple of the goddess Bēlet-Apim at Shubat-Enlil; and an unidentified temple.⁵ A fragment from Neo-Assyrian Ashur is all that remains of a text that treated in more detail a temple of the sky god Anu, presumably his sanctuary, E-ša-an at Ashur.⁶ A small Neo- or Late Babylonian tablet from Sippar gives measurements of various gates of E-babbarra, the great temple complex of the sun god Shamash, while another treats the dimensions of the foundation terraces of the temple of Shamash's vizier, Bunene.⁷ Finally a very brief text from Late Babylonian Uruk presents measurements of two sanctuaries in that city, the *Bit rēš* of Anu and E-ešgal of the goddess Ishtar.⁸

Although these texts have in common the metrological description of great religious buildings, it would not be proper to speak of them as forming a genre. Apart from the Old Babylonian tablets from Mari, which form a group on their own, no two of these texts are alike, either in structure or in detail. The approach of the E-sagil Tablet in particular is mathematical rather than topographical, while some other texts may have been drawn up for practical use by architects as aides-mémoires during rebuilding work.

The present addition to the corpus, MMA 86.11.102, is a fragment from the left edge of a tablet of two columns per side. Parts of cols. i, ii, and iv survive. The surviving text deals once again with Marduk's temple in Babylon, E-sagil. This is clear from the mention of the gate Ka-ḥegal in obv. col. i 19' and the appearance of the god Nādin-mê-qāti in rev. col. iv 16'; documentary evidence for both of these in E-sagil is presented in the Notes below. Unlike the other texts concerned with E-sagil and indeed all other texts of the corpus, the fragment 86.11.102 deals with minutiae. It is clear from the figures on the tablet that the dimensions involved are very small: the largest measurement in the available text is 10 cubits and 8 fingers (about 5.17 m), and the smallest is 1 cubit

and 8 fingers (about 67 cm). Where the tablet is well enough preserved to allow the reconstruction of a consecutive text, it appears that the dimensions considered are at largest those of a relatively small room and at smallest those of pieces of cultic furniture.

Not enough of the text has survived to enable us to discover if the tablet in its original and complete state covered the whole of the temple interior. There is perhaps a certain order detectable in col. i, at least, where the text is concerned first with the distance of a certain object (the *makkû*) from the chapels of Sîn and Nergal and then moves on to the dimensions of a symbol pedestal (*šabtu*) in the chapel of Nergal. The progression of the text, therefore, follows the layout of the temple's ground plan in this section at least. Unfortunately, the excavation of E-sagil,⁹ which of necessity was given over more to retrieving an architectural impression of its ground plan than to an examination of the contents and the identification of its various rooms, did not provide much information of the kind that might tie in with the details offered by our text.¹⁰ On another front little light can be shed on the architectural details found in the present text by the other documentary sources at our disposal. Ka-hegal has been mentioned as already known, and there is some possibility that the chapels of Sîn and Nergal in col. i 13'-15' can be tied in with two lines in a topographical list (see the Notes below).

The provenance of the tablet is unknown. Criteria of script and physical appearance probably date it to either the Seleucid or the Parthian period, although the text itself of course may be older. If the reading of the signs LA and IGI in col. iv 4', 6', and 15' as *lapān* is correct, then the date of composition is not likely to be earlier than the seventh century B.C., for the word *lapān*, an Aramaism, is not attested before the time of Tiglath-pileser III.¹¹ One possible circumstance for its composition is the rebuilding and refurbishing of E-sagil by kings Esarhaddon and Ashurbanipal, which followed Sennacherib's wholesale destruction of the city of Babylon and its temples in 689 B.C. Research into the ground plan of the temple necessarily preceded its rebuilding, and the rebuilders were careful to follow the ancient dimensions exactly, as Esarhaddon records:¹²

[*ina arḥi*] šal-me u₄-mu še-me-e še-er uš-ši-šú mah-ru-ú-ti 1 ammat ul a-še-eṭ ½ ammat ul ut-ter ki-i pī usurti-
šú mah-ri-ti at-ta-di te-me-en-šú

In a favorable month, on a propitious day, I laid its foundation platform directly on top of its ancient foundations, according to its former plan: I did not leave out a single cubit nor did I add on even half a cubit.

One can imagine that a text recording minute details of the measurements of a temple's interior could well have been a byproduct of this exercise. But a case can also be made for a much later date of composition. The dimensions and layout of E-sagil appear to have been of great interest to the priestly scribes of Uruk in the fourth and third centuries B.C., for it is they who have provided us with copies of two of the other three metrological texts dealing with the great temple of Babylon, namely the E-sagil Tablet and the Bricks of E-sagil (see Notes 2 and 4 to this text). As this writer has argued elsewhere, their interest may have been provoked by the desire to model the *bit rēš*, the new temple of Anu at Uruk, on the most eminent of existing Babylonian cult-centers.¹³

Metrology

Measurements in the text are given in cubits, fractions of cubits, and fingers. At the time of the Sargonid kings, two cubit standards were commonly in use. These were the ordinary Neo-Babylonian cubit (*ammatu*) and the long cubit (*ammatu rabitu*), a legacy apparently of the Kassite period. The long cubit measured half as much again as the ordinary cubit, and approximate modern equivalences have been calculated at about 75 cm and 50 cm, respectively. Both sizes of cubit were divided into 24 fingers (*ubānu*).¹⁴ Accordingly, where the text reads 8 fingers, the translation reads ½ cubit.

It is interesting to observe that the measurements in the text are given in multiples of one third of a cubit, with the single exception of a figure in col. i. 8', and there one suspects that 7 fingers may well be a scribal error for 8. This heavy reliance on the $\frac{1}{3}$ cubit in a text that deals with the measurements of a building is significant, for the standard size of Neo-Babylonian building brick measured roughly $\frac{2}{3}$ cubit square, with a half-brick (*arhu*) size of $\frac{1}{3} \times \frac{2}{3}$ cubits (i.e., 8 × 16 fingers). The dimensions of walls and fittings built with such bricks would have a natural tendency to be multiples of $\frac{1}{3}$ cubit. That this was so in practice is demonstrated by a Late Babylonian architectural plan published in the copy by R. Campbell Thompson.¹⁵ Here the walls of a building, perhaps a temple with twin cellae,¹⁶ are shown as a grid of bricks, which, when their numbers are added up and compared with the accompanying measurements, are found to be of standard $\frac{2}{3}$ cubit size. The measurements themselves are given as multiples of $\frac{1}{3}$ cubit, and, as in the present text, $\frac{2}{3}$ cubit is expressed orthographically as a fraction, while $\frac{1}{3}$ cubit is written as 8 fingers. The connection between numbers of bricks and length expressed in cubits and thirds of cubits seems inescapable. It is self-evident that the counting of bricks of a standard size was a most practical and convenient method of measurement, at the disposal of architect and builder alike. By way of confirmation one may refer simply to the text this writer calls the Bricks of E-sagil, in which the measurements of walls are stated in terms of brick-lengths.¹⁷

In view of the correlation of standard bricks and measurement in cubits, it seems probable that the cubit standard used in the text is the same as that used in the molding of the bricks. Since Neo-Babylonian bricks are commonly a standard 32 cm square—though the bricks of E-sagil, which are anything from 30 to 39 cm square,¹⁸ indicate that the standard was quite imprecise—and 32 cm is, for our purposes, very close to $\frac{2}{3} \times 50$ cm, i.e., $\frac{2}{3}$ ordinary cubit, it is safe to assume that the cubit standard of the text is this shorter cubit.¹⁹ Consequently, when ancient measurements are converted into modern, they are done so on the basis of the approximate equivalence of one ordinary Neo-Babylonian cubit to 50 cm.

1. AO 6555 = TCL 6 32.
2. The text is now re-edited, with BM 40813, a duplicate from Babylon, by A. R. George, *BTT*, no. 13.
3. VAT 9961 = KAR 364, joined to VAT 10335 and republished by E. Weidner, "Die Maße von Esagil und Ezida," *AfO* 20 (1963), p. 116 and pls. 7–8; new edition by George, *BTT*, no. 14.
4. W 22656/14 = von Weiher, *SpTU* 4, 220; new edition by A. R. George, "The Bricks of E-sagil," *Iraq* 57 (1995), pp. 173–97; also A. R. George, review of von Weiher, *SpTU* 4, *BiOr* 52 (1995), cols. 730–32.
5. Published by D. Charpin, "Le temple de Kahat d'après un document inédit de Mari," *MARI* 1 (1982), pp. 137–47; idem, "Temples à découvrir en Syrie du nord d'après des documents inédits de Mari," *Iraq* 45 (1983), pp. 56–63.
6. Ass. 19763, published in copy only by E. Weidner, p. 43 in W. Schwenzner, "Das Nationalheiligtum des assyrischen Reiches: Die Baugeschichte des Aššur-Tempels Ehursagkurkura," *AfO* 8 (1932–33), pp. 34–45.
7. Respectively, BM 78905, edited by T. G. Pinches, "The Gateways of the Shrines of the Gods at Sippar," *PSBA* 33 (1911), pp. 155–57 (cf. W. Röllig, review of A. Salonen, *Die Türen des alten Mesopotamien. Eine lexikalische und kulturgeschichtliche Untersuchung*, AASFB, 124 [Helsinki, 1961] in *WZKM* 62 [1969], pp. 299–300), and BM 56073 (CT 56, 447). Both tablets now appear in George, *BTT*, nos. 36, 37.
8. W 20030/108, published by J. J. A. van Dijk in *UVB* 18, pp. 60–61 and pl. 28b; also in van Dijk, *Texte aus dem Rēš-Heiligtum*, no. 96.
9. See F. Wetzel and F. H. Weissbach, *Das Hauptheiligtum des Marduk in Babylon, Esagila und Etemenanki*, WVDOG 59 (Leipzig, 1938), and the new revision of R. Koldewey, *Das wieder erstehende Babylon*, 5th edition, B. Hrouda, ed. (Munich, 1990), pp. 201–11.
10. The temple's layout was mostly recovered by tunneling along the interior and exterior walls, which left the inside of many chambers unexplored. One chamber that was completely cleared is that known to the excavators as Cella C, which by its orientation and the presence within it of a throne-dais can now be identified from a list of such daises as the chapel of the god Ninurta, the dais being the location of a throne of Marduk in his manifestation as Asarre; see further George, *BTT*, no. 6, l. 31 and commentary; idem,

“Babylon Revisited: Archaeology and Philology in Harness,” *Antiquity* 67 (1993), pp. 738–40 (the unpublished text mentioned there [p. 740] as reporting the presence in this chapel of a statue of Marduk is BM 119282, published by B. Pongratz-Leisten, *Ina Šulmi Īrub: Die kulttopographische und ideologische Progammatik der akītu-Prozession in Babylonien und Assyrien im I. Jahrtausend v. Chr.*, Baghdader Forschungen 16 [Mainz am Rhein, 1994], no. 6; cf. George, “The Bricks of E-sagil,” *Iraq* 57 [1995], p. 174, no. 7; and republished in W. G. Lambert, in review of B. Pongratz-Leisten, *Ina Šulmi Īrub*, in “Processions to the Akītu House,” *RA* 91 [1997], pp. 49–80). Other chambers can be identified on account of their position—e.g., the courtyards and the lobbies of the various monumental gates—but Cell C is the sole example in which the contents of a room clinches its identification.

11. See *AHw*, p. 4.
12. R. Borger, *Die Inschriften Asarhaddons, Königs von Assyrien*, AfO suppl. 9 (Graz, 1956), p. 21, ll. 41–46.
13. See George, “The Bricks of E-sagil,” *Iraq* 57 (1995), pp. 194–95.
14. On Neo-Babylonian cubits and associated metrological matters see M. A. Powell, “Metrological Notes on the Esagila Tablet and Related Matters,” *ZA* 72 (1982), pp. 106–23; idem, “Masse und Gewichte,” *RLA* 7 (1989), pp. 469–70.
15. CT 22, 50.
16. See the reconstruction proposed by E. Heinrich and U. Seidl, “Grundrisszeichnungen aus dem Alten Orient,” *MDOG* 98 (1967), pp. 40–45.
17. See Note 4 above.
18. George, “The Bricks of E-sagil,” *Iraq* 57 (1995), pp. 177–78.
19. The same standard, incidentally, is used to measure E-sagil in VAT 9961 + 10335, for which see Note 3 above.

Selected Bibliography of Metrological Texts Concerned with Temple Buildings

- W. Allinger-Csollich, “Birs Nimrud II. ‘Tieftempel’–‘Hochtempel’. Vergleichende Studien Borsippa-Babylon,” *Baghdader Mitteilungen* 29 (1998), pp. 95–330
- D. Charpin, “Le temple de Kahat d’après un document inédit de Mari,” *MARI* 1 (1982), pp. 137–47
- idem, “Temples à découvrir en Syrie du nord d’après des documents inédits de Mari,” *Iraq* 45 (1983), pp. 56–63
- J. J. A. van Dijk, “Die Inschriftenfunde,” UVB 18 (Berlin, 1962), pp. 60–61 and pl. 28 (W 20030, 108)
- J. J. A. van Dijk and W. R. Mayer, *Texte aus dem Rēš-Heiligtum in Uruk-Warka*, Bagh. Mitt., suppl. 2 (Berlin, 1980), no. 96
- E. Ebeling, *Keilschrifttexte aus Assur religiösen Inhalts* 2, WVDOG 34 (Leipzig, 1923), no. 364
- A. R. George, *Babylonian Topographical Texts*, OLA 40 (Leuven, 1992), nos. 13, 14, 36, and 37
- idem, “The Bricks of E-sagil,” *Iraq* 57 (1995), pp. 173–97
- T. G. Pinches, *Neo-Babylonian and Achaemenid Economic Texts*, CT 56 (London, 1982), no. 447
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68.

MMA 86.11.102

Plates 90, 91

H. 100 mm W. 89 mm Th. 35 mm

Obverse

Column i

- 1'. [4] *luṭ-t[u . . .]*
- 2'. 2 *e-lu-tú* 2 [*šap-lu-tú* . . .]
- 3'. 1^{en} *šá tēh*(DA) *ba-x* [. . .]
- 4'. *tariṣ(LÁ)^{iṣ}* 2 *šap-lu-[tú . . .]*
- 5'. 5^{2/3} *ammat(KÙS)* *ana pūt(SAG)* ¹*bīt(É) bi-ri-šú¹-[nu x ammat]*
- 6'. *ana šiddi(ÚS)* *bīt bi-ri-šú-nu a-lá-lu[m x x x]*
- 7'. 4 *ammat šiddu* 4 *ammat pūtu ina bi-rit luṭ-¹tu nadi(ŠUB)^{1[di]}*
- 8'. *bīt [x x x]* 7 *ammat* 8 *ubān(SI)* *šiddu* 6 *ammat* 7 *ubān pūtu*
- 9'. ¹*x x x x ku(?)¹-tal-la-šú* 1 *ammat* 8 *ubān^{ām}*
- 10'. [*x*] *šiddū meš u pūtātu(SAG.KI)^{meš}* 1-*niš ana bīti tarṣat(Á)^{at}*
- 11'. 2 *ammat bāb(KÁ)-šú ma-lak-šú* 7 *ammat šiddu* 1 *ammat pūtu*
- 12'. *ma-ak-ku-ú* 7 *ammat* 8 *ubān šiddu* 2 *ammat* 8 *ubān*
- 13'. *pūtu ultu(TA) a-su-mit šá bīt dSin(30)* 5 *ammat* 8 *ubān*
- 14'. *rūq(SÙ) ultu a-su-mit šá bīt dNergal(U.GUR)* 5 *ammat* 8 *ubān*
- 15'. *rūq šub-tum šá ina bīt dNergal* 2 *ammat* ^{2/3} *ammat šiddu*
- 16'. ¹*(?)¹ ammat* ^{2/3} *ammat pūtu šár dúbur* 31
- 17'. [*b*] *it būrti(PÚ) šá x GiŠIMMAR(?)* 6 *ammat* 8 *ubān šiddu* 5 [*ammat*]
- 18'. [^{2/3}] *ammat pūtu* 2 *ammat bāb-šú ana pān(IGI) kisalli(KISAL)* ¹*2¹* [*ammat*]
- 19'. [*bā*] *b-šú ana tēh ká.hé.gál bīt gīš[narkabti(GIGIR[?]) x (x)]*
- 20'. [*x*] ¹*x¹ 4 ammat pūtu* ¹*x x x x¹* [. . .]

Column ii

- 1'. *x [. . .]*
- 2'. *rabī(GAL)ⁱ* [. . .]
- 3'. *šá imitta(ZAG) na[dū(ŠUB)^ū* . . .
- 4'. *bīt GAB.GA[B . . .]*
- 5'. ¹*9¹ parakku(BÁRA) šá ina MIN x [. . .]*
- 6'. *ina at-man DIŠ x [. . .]*
- 7'. *UŠ x [. . .]*

Reverse

Column iv

- 1'. [.] *x x [. . .]*

Measurements of the Interior of the E-sagil Temple

Later 1st millennium

- 2'. [.....]-*ti* SA[L ...
 3'. [.....] x *ammat pū[t(SAG.KI)]* ...
 4'. [.....y] *ammat la-pà[n ...*
 5'. [x (x)] x *mu ultu(TA) ku-ta[l ...*
 6'. [x (x)] x-*šú* 2 *ammat la-pà[n ...*
 7'. [x (x)] x 2 *sip-pu bāb* x[...
 8'. [x (x)] n]*adi^{di}* 2 *ammat šiddu* 2 [*ammat pūtu* ...
 9'. [*ana šu*]mēl(150)(?) *bābi nadi^{di}* *bit* x [...
 10'. [^dL]*il-lum Bēlet-ilī(DINGIR.MAH)* u ^dN[in- (or ^dG[u-]) ...
 11'. [*šá ina bī*]t(?) *Nuska nadū* 1 *amma[t ...*
 12'. [x] x *KI-šú-nu* 1 *ammat* 8 *ubān* x [...] ...
 13'. [*šá(?) a*]n-ni-i 10(!?) (BE) *ammat* 8 *ubān* 2 [...] ...
 14'. [⁵ *ammat*] 8 *ubān* *šiddu* 1 *ammat* [⁸] [*ubān pūtu* ...
 15'. [*l*a-[*p*]àn *sip-pu šumēl(GÙB)* *bāb* [...] ...
 16'. [*šá* ^d*Na-din(!)*(tablet: MAN)-*me-qātī(ŠU^{II})* [...] ...
 17'. [*ana*] *elēnī(AN.TA)-šú-nu* 3 *am[mat* ...
 18'. [⁸] *ubān* x [...] ...
 19'. [x x] x [...] ...

Translation

Obverse

Column i

- 1'. (As for) the four vessel[s ... (there are)]
 2'. two upper ones and two [lower ones; (of the upper ones)]
 3'. one is next to the [....., the other ...]
 4'. is arranged; the two lower [ones are ... (It is)]
 5'. 5²/₃ cubits to the end of the room between [them, and 2²/₃ cubits]
 6'. to the side of the room between them. The cistern [...] ...
 7'. is 4 cubits long and 4 cubits wide; it is [located] between the vessels.
 8'. The room ... is 7¹/₃ cubits long and 6 cubits, 7 fingers wide.
 9'. The ... behind(?) it are each 1¹/₃ cubits (long).
 10'. ... the long and short sides together; it is pointed toward the room(?).
 11'. Its gate is 2 cubits (wide); its passageway is 7 cubits long and 1 cubit wide.
 12'. The *makkū* is 7¹/₃ cubits long and 2¹/₃ cubits
 13'. wide; from the stele of the chapel of Sîn it is 5¹/₃ cubits
 14'. distant; from the stele of the chapel of Nergal it is 5¹/₃ cubits
 15'. distant. The symbol pedestal that is in the chapel of Nergal is 2²/₃ cubits long and
 16'. 1¹/₃ (or 2²/₃ ?) cubits wide; there are(?) 31 ...
 17'. [The] well-house of ... is 6¹/₃ cubits long and 5[²/₃]
 18'. cubits wide; its gate facing the courtyard is 2 cubits (wide), its gate

- 19'. by the side of Ka-hegal is 2 [cubits (wide)]. The [Chariot(?)]-House [...]
 20'. ... is 4 cubits wide [...]

Column ii

- 1'. ... [...]
 2'. big [...]
 3'. which is positioned on the right [...]
 4'. room of ... [...]
 5'. 9 daises, which [(are located)] in ditto [...]
 6'. in the sanctuary of ... [...]
 7'. side(?) [...]

Reverse

Column iv

- 1'-2'. (too fragmentary for translation)
 3'. [...] x cubits wide [...]
 4'. [...] is y] cubits. In front [of ...]
 5'. [...] . . . from behind [...]
 6'. its [...] is 2 cubits. In front of [...].
 7'. [...] the two jambs of the gate of [...]
 8'. [...] is located. It is 2 cubits long and 2 [cubits wide ...]
 9'. is located [to the] left(?) of the gate. The room of [...]
 10'. Lillu, Bēlet-ilī, and [...],
 11'. [which] is located [in the chapel(?)] of Nuska, is 1 cubit [long ...]
 12'. Their [...] is 1 $\frac{1}{3}$ cubit ... [...]
 13'. [of(?)] this (object) is 10 $\frac{1}{3}$ cubits; two [...]
 14'. 5 $\frac{1}{3}$ cubits long and 1 $\frac{1}{3}$ [cubits wide ...]
 15'. in front of the jamb, on the left of the gate of [...]
 16'. of Nādin-mē-qātī [and Mukīl-mē-balātī?] ...
 17'. above them, 3 cubits [...]
 18'. $\frac{1}{3}$ cubit ... [...]

Notes

Column i

- 1'-6': As far as it is possible to tell, the text seems to be dealing with the respective positions of four vessels. Provisionally this writer has assumed these are *luṭtu*, “bowls,” but the signs here (and in l. 7') read *luṭtu* might equally be read ^{dug}tūn = *takāltu*, a pottery container of some sort. The presence of such vessels, however read, in a courtyard of E-sagil is attested in the Kislimu rituals of the temple (G. Çağırhan and W. G. Lambert, “The Late Babylonian *Kislimu* Ritual for Esagil,” *JCS* 43–45 [1991–93], pp. 96, 60,

reading *takāltu*). Their use in the cult is also implied by a list that associates one with a shrine of the divine exorcist, although in E-šarra at Ashur not in E-sagil (CT 46, 51 = George, *BTT*, no. 21, obv. 10'):

za.gin.mu.uš = [MI]N ^dKÙ·sÙ a-šar luṭ-! [u/ ^{dug}TÙ|N . . .]
Zagin-muš = (the seat of) Kusu, where the bowl/container [. . .]

From this one might imagine that these vessels played a role in the arts of Kusu, that is, they were used in ceremonies of purification with holy water. Their association in this text with a cistern would seem to confirm this (see Note 6' below).

- 6': Apart from appearing as a variant of *elallu*, a type of limestone, the word *alallu* (var.: *elallu*) is found in lexical texts only, where it translates Sum. alal(pÍSAN×A), from which it obviously derives (passages collected in *CAD* A/1, p. 329, s.v. *alallû*). According to *CAD* this *alallu* is attested outside lexical texts only as *elallû*, and that in an inscription of a Middle Assyrian king, Tiglath-pileser I, which describes the rebuilding of the temple of Anu and Adad at Ashur (A. K. Grayson, *Assyrian Rulers of the Early First Millennium B.C.* 1, Royal Inscriptions of Mesopotamia. Assyrian Periods 2 [Toronto, 1991], pp. 29, 105–8), *e-lal-la-a pa-ra-aṣ ilu-ti-šu-nu rabitiⁱⁱ i-na qé-reb-šu ad-di*, “Inside (the temple) I installed the *elallû* (for) the rites of their great divinity.” The Sumerian word is found in a cultic context in a passage of the Curse of Akkade (text established by J. S. Cooper, *The Curse of Agade* [Baltimore, 1983], p. 56, ll. 120–21):

gišalal.bi im.ma.ra.an.zil.zil (Narām-Sîn) tore out (E-kur's) *alallu*,
im.šèg.šèg an.na ba.e.e_{II} (so that) the rain of heaven ran away(?)

The dictionaries translate *alallu* as “pipe, conduit” (*CAD* as well as Grayson, *Assyrian Rulers*) and “Röhre” (*AHw*, p. 34, s.v. *alallu* II), relying on *Malku* = *šarru* IV 144, where *a-lal-lu-u* = *na-[an]-ṣa-bu-šá qanî*, “reed conduit” (parallel entry in *Antagal* F 156) and Hg. B II 101: [*giš*PÍSAN×A] = *a-lal-lum* = *x-x-ú [šá m]u-ṣi-i*, “. . . of the outflow” (see in addition A. Salonen, *Die Hausgeräte der alten Mesopotamier* 1, AASF B 139 [Helsinki, 1965], pp. 81–82). However, in the present text the *alallu* is almost certainly the subject of the measurements given in l. 7'; precious little can be missing in the break, perhaps a brief description or location. It thus measured some two meters square, dimensions that suggest that the *alallu* cannot here be a drainpipe that carries water out of the building. An alternative function is suggested by the orthographic evidence; PÍSAN×A is a container with water inside it. In the lexical citations collected in *CAD* A/1, p. 329 s.v. *alallû*, *alal* can take the determinative *dug* (Diri V 264; Urra X 220, Urra X 331) as well as *giš* (Urra VI 223; Hg. E 84) and is regularly paired with *pisan* = *pisanu*, “container, box.” Thus we may infer from the mainstream of the lexical tradition that an *alallu* can be a container for water, made of pottery or wood, seemingly separate from the “reed conduit” of *Malku* = *šarru* IV and *Antagal*. This would explain the curious entry *e-lal-lu* = *er-pe-e-tú* in *Malku* = *šarru* II 105, “water container = clouds” (similarly in *CAD* E, p. 75 s.v. *elallu* B; *elallu* = “water carrier [poetic word designating clouds]”). Hence we translate *alallu* as “cistern.” Note that, according to our text, the *alallu* is located between the vessels that were the subject of the preceding passage. One can readily imagine that the water collected in the cistern was poured into bowls (*luṭtu*) for use in rites of hand-washing and other cultic rituals of lustration.

- 9': The distributive function of the determinative *àm* would appear to prohibit taking the signs *tal-la-šú* in isolation, and further inquiry into *tallu* probably rules it out on metrological grounds. The basic sense of

the word appears to be a “cross-piece” of some kind (see *AHw*, p. 1311, s.v. *tallu* I; cf. p. 293, s.v. *gištallu*), and in the context of the structure of buildings it is part of the superstructure of a gateway, probably the lintel (as in the metrological tablet BM 78905, for which see the introduction to this text, and probably also in *RAcc*, p. 141, 370: *gištal-lu*; see also A. Salonen, *Die Türen des alten Mesopotamien*, AASF B 124 [Helsinki, 1961], p. 56). However, the gateways mentioned in the present text measure 2 cubits, while our *tallu* is only $\frac{1}{3}$ cubit long and thus too short to be a lintel. Although one notes the possibilities offered by two other meanings of *tallu*, respectively a potstand and a vessel of precious metal, used for oil or beer (*AHw*, p. 1311, s.v. *tallu* II), the difficulty of reconciling the singularity of *tallašu* with the distributive determinative suffixed to the number remains. Accordingly the adverbial accusative *kutallašu* is considered a more likely reading.

- 10': The syntax of this line and its connection with the previous one are problematic. The second half of the line is ambiguously written: what we have read as *ištēniš ana* could equally well be read as the numeral 81. The next sign is read here as é = *bitu*, but *pisan* = *pisanru* is also possible. Little sense can be extracted either way. Equally puzzling is the subject of *tarṣat*, which needs to be feminine and singular. The key to the understanding of the line may be the broken first sign; what remains of it suggests [TÙ]M.
- 12': According to the lexical texts (Diri II 318; Urra VI 82), *makkû* is the Akkadian for Sumerian GIŠ.GÍD, glossed mu-du-ul, ma-da-al, ma-ad-la, etc. The signs GIŠ.GÍD suggest that it was a long piece of wood, and consequently the dictionaries opt for a meaning “pole” (*CAD M/1*, p. 133 s.v. *makkû* A; *AHw*, p. 589 s.v. *makkû*, *meqiu*). Such a meaning does not suit *makkû* in the present context, where it is an object measuring approximately 3.7×1.2 meters, equidistant (some 2.7 meters) from the stelae of the chapels of Sîn and Nergal, but clarification must await further evidence.
- 13'-14': The chapels of Sîn and Nergal mentioned here are evidently small chambers within E-sagil. For a possible reference to them in a topographical list see the Note on l. 15 below. The *asumittu*, usually translated “stele,” is an official inscription, usually on stone, less often on bronze. A Neo-Babylonian letter attests to the presence of such “stelae” in religious buildings (YOS 3, 4:6–12): *nāa-a-su-mi-né-e-ti ši-na šá ga-la-la ša-at-re-e-ti šá ú-še-bi-l[ak]-ku ina bīt ilī^{meš} a-šar šá ṭa-a-bu šu-kun-ši-né-e-tu*, “As for these inscribed boulder-type ‘stelae’ that I have sent you, put them in the gods’ chapels, in the appropriate positions.”
- 15': The *šubtu* of a god is literally his “seat.” In cultic practice this meant that the *šubtu* was the pedestal on which his symbol rested. As such it was depicted on *kudurru*’s as a square object, with inset panels, surmounted by the divine symbol or image. Symbol pedestals of stone have been found in Assyria (five excavated at Ashur and one found at Kâr-Tukultî-Ninurta; see W. Andrae, *Die jüngeren Ischtar-Tempel in Assur*, WVDOG 58 [Leipzig, 1935], pp. 57 ff.). The smallest of these measures 52×12 cm, and the largest 109×51 cm. The *šubtu* described in the present text is larger still, measuring about 130×80 cm or 130 cm square if the damage in l. 16' hides another integer. A large number of these symbol pedestals were in E-sagil, and they are listed in Tablet II of the series *Tintir* = Babylon (George, *BTT*, no. 1). Often the list gives information as to the whereabouts of the pedestals. The text is not complete, but the following excerpt may have a bearing on the *šubtu* mentioned in our text as being in the chapel of Nergal (*Tintir* II 34–35, dupl. CTN 4, 237):

[é].du₆.kù = šubat ^dSîn bītū šá ^{im}amurri šá ku-tal bur-tum
 é.h[u]š.ki.a = šubat [^d.....]

[House,] Pure Mound = the seat of Sîn: the chapel in the west, behind the well;
 Dread House of the netherworld = the seat [of]

Of particular interest is the description of the *šabtu* of the moon god Sîn. In the present text a well is mentioned in col. i 17', immediately after the section concerned with the chapels of Sîn and Nergal. If there is an orderly progression in the text, as suggested above, the well would be in the same locality as the chapels of these gods. The conjunction of the chapel of Sîn and the well-house, when compared with *Tintir*'s pedestal of Sîn "behind the well," leads one to believe that both texts deal with the same part of E-sagil. If this is so, it is tempting to restore the name of Nergal in the second line of our quotation from *Tintir* II. That we should surrender to this temptation is in fact certain, because the temple name in that line, now that it is deciphered, can be seen to be one that traditionally belongs to Nergal, in his name of Huškia (see George, *House Most High*, pp. 102, 492, where an entry for a shrine of this name in E-sagil can now be inserted).

- 16': The end of the line is obscure. ŠÁR could, of course, be read as the numeral 40. The following sign is KISIM₅×U, which, read dûbur, means "foundation" (Ea V 104–5: ^{du-}bûr^{dubur}(KISIM₅×ŠE) = iš-[du], ^{MIN}dûbur(KISIM₅×U) = MIN; cf. á A = nâqu V/2 126–27). See also the Creation Epic, in which ^dlugal. áb.dûbur, the 36th name of Marduk, is explained. There dûbur corresponds to *duruššu*, "base" (*Enūma eliš* VII 91–92; see the edition by W. G. Lambert, [forthcoming]).
- 17': For a well in E-sagil see the note above on col. i 15'. The well-house is qualified by a group of two signs, the significance of which has not been discovered. Some cultic location might have been expected.
- 19': ká.hé.gál, the "Gate-of-Abundance," is well known as one of the gates of E-sagil, not only from the enumerations of such gates in the E-sagil Tablet, an inscription of Neriglissar and *Ludlul* IV, but also in the gate lists, in the metrological tablet VAT 9961 + 10335, and in a ritual fragment (George, *BTT* nos. 6:4; 7:10'; 14:25, 36; 40:17', 19'). The location of the gate is fixed as the main gate of the west front of the main building, behind the complex of chambers in which the cella of Marduk itself was located (*ibid.*, p. 87).

The restoration at the end of the line is suggested by the absence of any other known *bit giš*[.] in E-sagil. The Chariot House (*bit gišnarkabti*) of Marduk's temple is found in *Tintir* II 16, where it is the location of a *šabtu* of Lugalkugra. However, the metrological text VAT 9961 + 10335 I. 7 places it adjacent to the lobby (*ašrukkatu*) of Ka-ude-babbar, the south gate of the main building of E-sagil, well away from the vicinity of Ka-hegal (George, *BTT*, p. 127). If our text follows a logical progression through the temple's plan, such a position makes the restoration of the Chariot House in this line very uncertain.

Column ii

- 5': Cultic throne-daises (*parakku*), some of which may have been in E-sagil, are listed in *Tintir* V 1–48 (of Marduk), and others, both within E-sagil and without, in assorted topographical texts (George, *BTT*, nos. 6:31–34; 9; 10; 11; 48; cf. also no. 1 = *Tintir* V 82–88; E. Ebeling, *KAR* 142, col. ii 1–10: Asakku Demons, edited by B. Pongratz-Leisten, *Ina Šulmi Īrub: Die kulttopographische und ideologische Progammatik der akītu-Prozession in Babylonien und Assyrien im 1. Jahrtausend v. Chr.*, Baghader Forschungen 16 [Mainz am Rhein, 1994], p. 222).

Column iv

- 10': Seats of both Lillu and his mother Bēlet-ilī are known in E-sagil, respectively é.igi.du, “House-of-the-Leader,” in Eš-ša-abzu, a chamber of uncertain location (*Tintir II 11'*), and úmun.sag, “(House-of)-Foremost-Craft,” in the lobby of the south gate, Ka-ude-babbar (*Tintir II 41*).
- 11': If the reading of the line is correct, there may be a mention of the same shrine in *Tintir II 32*, which lists as a *šubtu* of Nuska an é.gir₄(?).kù, “House, Pure Oven.” The chapel of Nuska mentioned in the E-sagil Tablet (28–29) is not in E-sagil but in the temple of E-temen-anki, the ziqqurrat, called *nuhar* in that text.
- 16': In view of the masculine plural suffix in the following line another god is probably to be restored here alongside Nādin-mē-qāti, “He who Proffers the Water-of-the-Hands.” The obvious candidate is Mukīl-mē-balāti, “He who Presents the Water-of-Life,” who forms a pair with Nādin-mē-qāti in E-sagil. There they share a *šubtu* with the appropriate name of é.a.sikil.la, “House-of-Pure-Water” (*Tintir II 37*), act as the two sheriffs (*utukku*) of the temple (so the god list An = *Anum II*), and attend Marduk at his morning meal (*Kislimu* ritual: G. Çağırgan and W. G. Lambert, “The Late Babylonian *Kislimu* Ritual for Esagil,” *JCS* 43–45, p. 95, 56), no doubt to slake his thirst and wash his hands, respectively (for full documentation see *ibid.*, p. 101).

Nos. 69–71

Commentaries

Preface

W. G. Lambert

Commentaries are one of the later manifestations of Babylonian academic learning. The scholarly tradition that had transmitted learned texts down through the centuries needed to explain difficulties or other matters that are not self-explanatory. The earliest attempts along those lines are the Babylonian glosses to a few selected words in Old Babylonian copies of Sumerian literary texts. Such glosses, however, became superfluous when complete translations were compiled. Bilingual word-lists could of course help in this matter, but it was much more convenient to have the material gathered in glosses or included in translations. Formal commentaries, however, allowed ancient expositors more scope, since they went beyond simple glossing at times and explained the content of lines as well as offering deeper philological explanations.

So far only first millennium B.C. copies of commentaries are known, from ca. 700–200 B.C. The lack of commentaries from earlier centuries may be because libraries of those times have not survived, but commentaries probably did not exist before the later Kassite period, ca. 1200 B.C. As far as we can judge, not all Babylonian texts were ever the subject of commenting. The Babylonian Gilgamesh Epic is a long traditional literary text, but so far no scrap of any commentary on it has survived, and it is quoted in other commentaries only extremely rarely. The same holds for the Epic of Atra-hasis. In contrast the so-called Babylonian Epic of Creation, *Enūma eliš*, was the subject of more than one commentary. The reason, no doubt, was that the text was conceived to be important for scribes, priests, and society in general, since it expounded on how Marduk, city god of Babylon, rose to supremacy in the pantheon. In contrast, while the legends of Gilgamesh and Atra-hasis were of interest, they had no practical theological relevance. The same principle can be seen in the abundance of commentaries on omens of all kinds, of which our text No. 71 (a commentary on *Enūma Anu Enlil*) is an example. As judged at the time by the relevant experts, omens had great value in preserving life and even society as a whole, but they were difficult and specialists' texts and so needed to be understood and handled correctly.

The commentary on a list of *materia medica* (text No. 69) has a similar motivation. Medical texts had value in society and needed to be understood correctly, but the actual comments are more philological than pharmaceutical and contribute more to scribal knowledge than to medical practice. This latter motivation was widely at work. Literary texts with obscure words and passages were often subject to commenting, and lexical lists themselves were also the subject of commentaries, clearly for philological purposes.

A certain development can be seen in the surviving commentaries. Those on Late Assyrian tablets date to ca. 750–600 B.C., while those on Late Babylonian tablets date for the most part to ca. 500–200 B.C. The ones from Assyrian libraries are most probably of Babylonian origin, and they offer much simpler philological material and a less developed exposition of content. The late Babylonian scribes not only glossed but also parsed verbs, and both in linguistic material and in matters of content they could quote lines from other texts to justify the points they were making. They also developed techniques of interpretation that may seem obviously wrong to us but had considerable

impact on the history of interpretation, since Rabbinic canons of interpretation, such as the seven canons of Hillel, depended in part on Babylonian predecessors, whose methods were in use in the Hellenistic period.

No. 69

Explanatory Commentary on a List of Materia Medica

Irving L. Finkel

Introduction

MMA 86.11.109 differs in function from the medical tablets (texts Nos. 30–33) that are concerned with healing techniques directly applied to patients. The present document, a commentary, reflects the textual study of the inherited medical literature. Medical texts are one group that was subjected to explanatory commentaries, and occasionally the information in them, designed as it was to illuminate troublesome or obscure passages, can be useful for the modern scholar.

The real context in which such commentaries were used is not known. Clearly they are fundamentally didactic, but it is not clear if a commentary such as the present example was composed within the medical fraternity, for straightforward use there, or if it was more a matter of learned textual exegesis in action (compare the other commentaries mentioned in the Notes to this text). The author here was a conventionally educated man judging from the material that he quotes: bilingual proverbs, a Sidu-series tablet, and the Fable of the Fox.

As with other commentaries the scribe utilized two types of gloss marks to separate the entries. A simple form with two *winkelhaken* (here rendered as a colon) serves to equate a : b, but the more complicated form with three *winkelhaken* (here rendered as ::) probably signals either the beginning of a new commented section or its completion. In clear contexts this clue can suffice to indicate the general nature or even the specific locus of the underlying textual passage. In the present case such triple *winkelhaken* signs appear three times.

Introductory

- I. 1. :: gišBÚR : iṣ-ṣi piš-ri . . .
- I. 12. :: Ú TIN.TIN : Ú NAM.TI.LA . . .
- I. 13. :: Ú U.X [. . . : . . .] . . .

Concluding

- I. 3. . . . gišMES.AN : GIŠ dul-bi ::

If this analysis is correct, it suggests that this underlying text is not a plant list as such (since the sequence GIŠ . . . Ú . . . should not appear normally in a true plant list) but rather is either a list of drugs or a medical text in which the items listed have been prescribed. Compare, for example, BM 76487 (CT 41:45), a commentary on F. Köcher, *Keilschrifttexte zur assyrisch-babylonischen Drogen- und Pflanzenkunde* (Berlin, 1955), no. 28. Individual items

have been taken as the starting points for far-reaching commentary. On the other hand it is possible that the specific use of these triple *winkelhaken* is not so exact.

Consideration of the left edge of the reverse suggests that there is not a great deal missing at the beginning of the lines in the obverse; for example, perhaps l. 1 can be restored simply as [giš]GEŠTIN.GÍR.RA : a-mur-di-in. If indeed the colophon does signal that the commentary is complete, it is likely that this tablet is part of a sequence of tablets. The translation gives some idea of the workings of such texts, but for a good introduction to the genre as a whole, the reader is referred to A. R. George, "Babylonian Texts from the Folios of Sidney Smith. Part Two: Prognostic and Diagnostic Omens, Tablet I," *RA* 85 (1991), pp. 137–63.

The colophon contains much of interest. The scribe is a descendant of the famous Babylonian Egibi family, and he is probably named Nabû-balâssu-iqbi, son of Marduk-zêra-ipuš (see Notes to this text). The writing of a sequence of UD signs is certainly cryptographic, as are other usages in this colophon, and all are of a piece with the world of commentaries and esoteric scribal usage.

69.

MMA 86.11.109

Plates 92, 93

H. 79 mm W. 87 mm Th. 28 mm

Explanatory Commentary on a List of Materia Medica
Later 1st millennium

Obverse

1. [. giš]a-mur-di-in :: GIŠ.BÚR : iš-si piš-ri : ūšal-¹la-pa-ni¹
 2. [.] na₄su-ú : GIŠ d⁴UTU : dul-bi : GIŠ.MES.AN :
 3. [.] giš me-si : giš me-suk-kan-nu : GIŠ.MES.AN : giš dul-bi ::
 4. [GIŠ.ERIN.BAD :] bal-¹tī-it-tu šá ŠÀ giš ERIN : ūha-am : giš da-ad-da-ri :
 5. [. in]a ÍD tab(!)(tablet: UB)-ba-ši-i mu-«:»-ú-ka da-ad-da-ri te-ek-kel-mu-ú
 6. [. . . . ina l]i-ib-ba-ti-šú dad-da-ri ú-še-ši ina EŠ.GÀR šá SI.DÙ qa-bi
 7. [. . . GIŠ.Ú.GÍR.HA]B : ūpu-qut-tu₄ : šal-šiš Ú.DAR.DAR.RI :
 8. [. . . i]š-si šá-ki-in : Ú.ZA.LU.UB Ú.AN.ZA.LU.UB šá ŠE.GIŠ.¹Y¹
 9. [. . .] ūha-am šá IG̃I me-e GIŠ.A.ZA.LU.UB i-qab-bu-šú lib-b[u-ú]
 10. [. . .] x ÍD ūšá-ki-ru-ú ina ši-qa-a-tú šá ina EŠ.GÀR KA₅X_A iq-bu-[ú]
 11. [. . .] x (x) ár-tu₄ hu-ud-dul lib-bi : PA : ár-tu₄ : GI ZÚ.LUM.[MA . . .
 12. [. . . hu-u]d-dul lib-bi :: Ú.TIN.TIN : Ú.NAM.TI.LA : Ú.NUMUN.GI[Š . . .
 13. [. . . .] ¹:¹Ú GAL : šam-mu ra-bu-ú : ūIG̃I-lim ūU.X [. . .]
 14. [. . . .] Ú ZÚ-ta-ma-at : šá-niš šam-mi GIŠ.MI ku-šá-ri [. . .]
 15. [. . . .] x x x x-šú(?) : iš-si bul-tu : TIN : iš-si : TIN : ba-[a-₄tu]
 16. [.] x GIŠ ki-iš-šú GIŠ d⁴UTU x sin nu x [. . .]
 17. [.] x šá-niš GIŠ x [. . .]
 18. [.] x x [. . .]
- (remainder broken)

Reverse

(gap of approximately half of the reverse)

- 1'. x [...]
- 2'. [.....] *sa-a-tu šu-¹ut¹* KA [x x] x x x x AL.TIL
- 3'. [..... U]D UD UD UD UD.UD-TIN-su-E A šá ^{1d}AMAR.UTU-NUMUN-DÙ <A> ^{1d}E₆-gi₇-ba-ti-la
- 4'. [SA]R-ma ib-ri
- 5'. [..... U]D UD UD UD UD UD *ma-diš ma-diš li₆-sur li₆-šá-qir al-la* DUMU EN *du-ul-la* x [x (x)]

Under Edge

- 6'. 4 IGI.TAB

Translation

(Note: The material in parentheses has been added for clarity by the present writer.)

Obverse

1. [....] bramble (*amurdinnu*) : GIŠ.BÚR (Sum.: “solving wood”) : solving wood : *šallapānu* plant
2. [...] . . . sū stone : GIŠ. ⁴UTU (Sum.: “tree of Šamas”) : plane tree: GIŠ.MES.AN (Sum.: “divine heroic tree”)
3. [.....] mēsu tree : *mesukkannu* tree : GIŠ.MES.AN (Sum.: “divine heroic tree”) : plane tree :
4. [GIŠ.EREN.BAD (Sum.: “cedar tree beetle”)] : a wood-eating insect inside a cedar tree : *ham* plant : *daddaru* plant (malodorous, thorny)
5. [.....] “When you are in the river, your waters are malodorous (lit.: a *daddaru* plant); you (who?) glare.”
6. [.....] “In his anger he produced a great stink,” it is said in the Series of Sidu.
7. [...] GIŠ.Ú.GÍR.H]AB (Sum.: “stinking *ašāgu*[?]”); *puquuttu* plant (thorny) : thirdly Ú.DAR.DAR.RI : *daddaru* plant (malodorous)
8. [...] w]ood is placed : Ú.ZA.LU.UB Ú.AN.ZA.LU.UB of sesame oil.
9. [...] the *ham* plant that is (found) on the surface of water they call A.ZA.LU.UB wood; it means
10. “[...] . . . of the river(?), *šakirū* plant through irrigation,” which is said in the Series of the Fox.
11. [...] . . . twig . . . inside : PA (Sum.: “twig”) : twig (*artu*) : dat[e . . .
12. [...] . . . inside/heart : Ú.TIN (Sum.: “rejuvenating plant”) : Ú.NAM.TI.LA (Sum.: “plant of life”) : seed of [...] tree.
13. [...] Ú.GAL (Sum.: “big plant”) : big plant : *imhur-limu* plant (it-cures-thousands) : . . . [...] plant.
14. [...] Ú ZÚ-ta-ma-at (Akk.: “tooth of the sea”) : secondly the plant of the shade of the reed shelter [...]
15. [...] . . . : wood of life : TIN : wood : TIN : life
16. [...] . . . wooden bundle : wood of Šamas : . . . [...]
17. [...] . . . secondly . . . wood [...]
18. [...] . . . [...]

Reverse

(provisionally understood as follows)

- 1'-2'. [...] Commentary on [...] . . . finished.

Under Edge

6'. four(?) collated

Notes

Obverse

- 5–6: These lines are quoted from the series of Sidu, while l. 5 is known as a bilingual proverb in Lambert, *BWL*, p. 244, ll. 19–20 (see I. L. Finkel, “On the Series of Sidu,” *ZA* 76 (1986), pp. 252–53. The verb *te-ek-kel-mu-ú* has no place in the Sidu passage, which continues with *ap-pu-na-ma*.

7: The plant name \bar{U} .DAR.DAR.RI seems to be unparalleled, and perhaps it represents Aram. *dardar*, “thistle, artichoke,” rather than an ideogram for \bar{U} *daddaru*.

10: This quotation is an otherwise unrecovered line from the Fable of the Fox, for which the scattered sources have been assembled in Lambert, *BWL*, pp. 186–209. Note KA₅ \times A for KA₅.A, and see Note on text No. 31:14' above.

14: \bar{U} ZÚ-ta-ma-at represents the mineral *imbū tāmtim*, usually written \bar{U} ZÚ.A.AB.BA, “sea ivory”; for the reading ZÚ see the gloss in K 3361 l. 13 (Macmillan, *Religion of Babylonia and Assyria*, BA 5, p. 680). The continuation of the line draws on the lexical equation di-mu-uš \bar{U} GIŠ.MI = *ku-šá-ru* (Diri IV 29; see CAD K, p. 598 s.v. *kušāru* lex.).

Reverse

- 2': The tantalizing signs in the middle of this line would have given us the name of the composition under comment.

3', 5': The sequence of UD signs in these lines is paralleled in the colophon on the commentary tablet DT 84, given below with related colophons from the same scribal family. The use of groups of one sign with different values is an old conceit of cuneiform scribes; cf. *i-lí* in personal names from the Fara period and onward and EN EN.EN for *bēl bēli* in first-millennium library tablets. Thus it must be assumed that in the groups of UD signs here, each one has its own value and results in a meaningful sequence. DT 84 offers the best chance of solution, since it alone is complete, and the context is paralleled in the other two colophons given below. What is required is a personal name followed by A šá, then a second personal name ending in *balāssu-iqbi*. From these related colophons, and from papponymy (naming a grandson after his grandfather), a rendering of DT 84 may be suggested:

^dUD UD UD UD UD UD UD UD
^dAMAR.UTU-NUMUN-DÙ A šá I ^dNabû(NÀ/PA)-

This proposal can be justified from the sign values given in the lexical series, from the later grammatical texts, and from the etymological theology best seen in *Enūma eliš* VII. The lexical and grammatical material can be found in *CAD* under the appropriate Akkadian words and will not in those cases be cited here. The equivalences just assumed will now be justified in sequence:

UD = AMAR: the ancients certainly assumed the identity of the Sumerian (a)mar and the Akkadian *mār(u)*, as in the lexical equivalence (a)mar = *māru*. More generally see W. G. Lambert, “Babylonian Linguistics,” in K. Van Lerberghe and G. Voet, eds., *Languages and Cultures in Contact: At the Crossroads of Civilizations in the Syro-Mesopotamian Realm Proceedings of the 42nd RAI*, Orientalia Lovaniensia analecta (Leuven, 1999), pp. 217–31; also W. G. Lambert’s article “Etymology, Ancient Near Eastern,” in R. J. Coggins and J. L. Houlden, eds., *A Dictionary of Biblical Interpretation* (London/Philadelphia, 1990), pp. 214–16. Thus UD = AMAR through the short form of the Sumerian dumu, du, being identified with the value *tú* of the sign UD. Interchange of related consonants such as D and T is a feature of this etymological system (see the articles just cited).

UD = *utu* is self-evident.

UD = *zēru* derives from TUM₄ = *zēru*, with TUM₄ shortened to *tu_x* and linked to *tú*.

UD = *ibni* comes either from DÙ = *banû*, via DÙ = *tú*, or from (Ù)-TU = *banû*, again via *tú*.

UD = A: since A here = *māru*, this is again based on DU as the short form of dumu being equated with *tú*.

UD = *šá*: in lexical texts ù = *ša-a*, so *u₄* is equated with ù.

UD = DINGIR: while the UD.GAL.NUN equivalence UD = AN is a possible explanation, the uncertainty as to whether or not knowledge of this system lasted so long leads to the preferring of u and *u₅* = *ilu* in the lexical tradition, as then equated with *u₄*.

UD = *nabû*: cf. the commentary on *Enūma eliš* VII, 19 (STC 2 pl. 51 col. ii 9ff.): dù = *né-bu-¹ú*¹, so again DÙ = *tú*.

Thus only UD = DIŠ remains unexplained so far, but no doubt the ancient scribes had their explanation. Curiously DIŠ is also missing at the beginning of the line in DT 84.

This system justifies reading the second line of the colophon under comment: . . . U]D UD UD ^{ld}Nabû-TIN-su-E, etc., but the first three signs and the first six of l. 5' must await the finding of parallels in normal orthography (the proposed reading just given is owed to W. G. Lambert).

The Related Colophons

(a) DT 84 rev. 1'–4':

[*šá ina*] ¹*muḥ-hi* KUŠ *ma-gal-la-at*¹ *šá TA x* . . .

^dUD.UD.UD.UD.UD.UD.UD-TIN-[su-E]

A ¹E-gi-ba-ti-la *a-na* ¹IGI¹.L[Á-šú] DÙ-ma *ib-[ri]*

(Commentary on divination by appearance of the bones in a sheep’s wrist, incipit: *šum₄-ma šu-ma-at ši-bu u mu-kal-lim-tú šá i[s-ri]*; cf. K. 3978+ in part CT 31, 17–18)

(b) DT 37 (CT 41, 31) rev. 38:

IM.GÌ.DA ^dAG-TIN-su-E A *šá* ^{ld}AMAR.UTU-NUMUN (collated)-DÙ A ¹KU-ba-ti-la *šu*^{II} ^{ld}EN-MU-SI.SÁ DUMU-šú
(Commentary on *Šumma ālu*; pigs)

(c) DT 87 rev. 9'–10':

[IM.GÌ.DA(?) ^dA]G(?)TIN-su-E A *šá* ^{ld}AMAR.UTU-NUMUN-DÙ A ^{ld}[Egibatila]

[*šu*^{II} ^{ld}AM]AR.UTU-NUMUN-DÙ A-šú *pa-liḥ* [^dNabû(?)]

(Commentary on R. Labat, *Traité akkadien de diagnostics et pronostics médicaux* [Leiden, 1951])

No. 70

Medical Commentary

Erica Reiner

70.

MMA 86.11.287E
Plate 94
H. 63 mm W. 25 mm Th. 25 mm

Medical Commentary
Later 1st millennium

Obverse

1. [...] IGI : AN.DA. [...]
2. [...] šá UD.KIB.NUN.^k[...] [...]
3. [...] ^dALÀ]D šá-né-e ^dE[n-lil(?)]
4. [...] X : MUL.BIR [...]
5. [...] šu-ra-ru šá X [...]
6. [...] X : sa-a-hu [...]
7. [...] : MUN eme-sa[l-lim]
8. [...] KUR-ú : SU-šú NI [...]
9. [...] hu-un-tu : šu [...]
10. [...] IG]I(?) : AN X [...]
11. [...] NU KAK X [...]
12. [...] : AN X [...]
13. [...] R[U(?)] ...

(rest of obverse broken)

Reverse

(beginning of reverse broken)

- 1'. [...] ^dU]TU.NUMU[N ...]
- 2'. [...] ^dUTU [...]
- 3'. [...] X (x) [...]

Translation

This text is too fragmentary for translation.

Remarks

This medical commentary was first taken to belong with the celestial omens because it mentions MUL.BIR, Akk.: *kalītu*, “the Kidney star.” However, the entry MUL.BIR [...] (l. 4) seems to comment on a substance such as

“ox-kidney” used in the prescription, just as in the commentary published as Hunger, *SpTU* 1, 54 according to which ūš BIR GUD (Akk.: *dam kalit alpi*) of l. 10' is commented on with MUL.BIR : *ka-li-ti* in l. 11'. Some of the other preserved terms are also found in medical texts: MUN (= *tābat*) *eme-sal-lim* occurs after BIR GUD in *AMT* 99,3:8 among fumigants; also *KAR* 157:rev. 36; *surāru* (l. 5) “lizard” is used in medicine (see *CAD* S, pp. 254–55 s.v. *surāru* A); and *hunṭu* (l. 9) is the word for “fever.” In addition, the mention of the city of Sippar (UD.KIB.NUN^{ki}) in l. 2, of a “deputy” of the god Enlil(?) in l. 3 (for which see *CAD* Š/1, p. 398 s.v. *šanū* 4'c) may be noted.

No. 71

Commentary on *Enūma Anu Enlil*

Erica Reiner

71.

MMA 86.11.287A, B, C + MMA 86.11.503
Plates 95, 96
H. 85 mm W. 136 mm Th. 36 mm

Commentary on *Enūma Anu Enlil*, Tablet 5
Later 1st millennium

Obverse

- 1'. [..... x Š]U(?) SI AN.[MI(?)] . . .]
- 2'. [..... A]N.MI GAR-ma KUR KÚ šá E-[ú(?)] . . .]
- 3'. [.....] šá-niš 5 ŠU.SI AN.MI [(x)]
- 4'. [..... U]D.16.KAM ina IGI MAN DU-ma šá KA 2-[i (x)]
- 5'. [.....] x ina UD.16.KAM.ME : DUMU^{meš} URU BE-mar bu-še-e URU ig-gam-ma-r[u]
- 6'. [.....] : a-ra-ku : GÍD.DA : šal-pú-tim šá-niš UD.1.KAM UD.16.K[AM]
- 7'. [....] x SI^{meš}-š[ú(?)] x DAG AN.MI BE-til[m]
- 8'. [.... U]D.1.KAM ú-tan-[n]a-at-ma : DIŠ ka-pil SUR : sa-ra-ri šá ka-pa-lu
- 9'. [.... A]N.MI šá-niš UD.1.KAM TUR-ma
- 10'. [DIŠ IGI.DU₈.A Sin ina] maš-kán-šú nam-rat šá ina IGI.DU₈.A ITI LAGAB šá KA 2-i UD.1.KAM UD.14.KAM
- 11'. [DIŠ UGU maš-kán-šú i]š-ta-qú UD.30.KAM ina MAN DU IGI-ma UD 12(?) Sin ina IGI MAN iš-qú šá KA 2-i
i-šaq-qí-ma IGI-ma
- 12'. [DIŠ ina maš-kán-šú iš-t]a-pil šá UD.1 ma-diš šap-lu UD.15.KAM ina IGI MAN DU-[ma]
- 13'. [.....] 'x x' IGI-ma UD.16 DU-ma : DIŠ 'ú'-šap-pil-'ma(?) IGI(?)-ma(?)¹ [....]
- 14'. [.....] x KUR nu-'kúr'-tum ana 'LUGAL¹ DU : UD.DA.GÍD.DA : šal-pú-ut-t[im]
- 15'. [.....] šá lum-nu x : ni-is-sa-tum ana x [....]
- 16'. [DIŠ GIM bi-ib-bu]-lu uš-ta-qir [x] x-ma lib-bu-ú UD.NÁ.A it-[....]
- 17'. [DIŠ ina MURUB₄] AN-e IGI-ma x [AN.M]I BE-tim GAR-ma ma-la UD.SAR TAK₄-ma šá [....]
- 18'. [.....] x : IGI.DU₈.A x [.... ú-tan-n]a(?)at-ma GUD.UD : x [....]

Reverse

1. [.] IGI-ma šá-niš ina ^dUTU.È GAR AN.MI BE-tú KA×MI UD.D[U(?) . . .]
2. [.] IGI-ma ma-la UD.5.KAM ba-il šá KA 2-i x [. . .]
3. [. . . ra-ba]-su : šá KA 2-i : a-bur-[riš . . .]
4. [.] x-ma šá-niš iz-nun x EGIR-sà BE M[I(?) . . .]
5. [.] x KAM-ma x [x] x KU-ma šá-niš GUD.UD TE-šú-ma : U₅ : šá-qu-ú : SAL.UŠ.DAM ^{hi-ir¹-t[um]}
6. [.] UD.14.KAM AN.M[I GAR]-ma šá-niš UD.15.KAM EGIR-sà BE M[I(?) x] MAN DU-ma šá KA 2-i ^dGUD.UD
ana Sin TE-[ma]
7. [. . . -h]a ina IGI MAN x [']E¹-ma šá KA 2-i ina u₄-mu AN.MI GAR-an (erasure) K[A . . .]
8. [. . .] x GAR ina u₄-mu È-a AN.MI šak-nu : šá-niš UD.1 TÜR NIGÍN-ma ù šá-qí-ma AN.M[I . . .]
9. [. . .] UD.1.KAM ina MAN DU ina MURUB₄ AN-e IGI-ma šá-niš ina MURUB₄ AN-e AN.MI GAR-ma šá KA 2-i šá ina
IGI.DU₈.A ITI x [. . .]
10. [. . U]D.14.KAM lu UD.27 AN IGI-ma šá-niš 1-en ina šà ^dUDU.BAD^{meš} lu UD.1.KAM lu UD.14.KAM lu
UD.27.[KAM . . .]
11. [. . M]UL TAK₄-ma šá KA 2-i AN TE-šú-ma šá KA 3-šú ina AN.^{!M}I¹ ki-ma MUL TUR [. . .]
12. [. . šá-niš MUL^{meš} IGI^{meš} UD.1 lu UD.14 lu ^dSAG.ME.[GAR]
13. [. . šá K]A 2-ⁱ¹ ^dSAG.ME.GAR UD.14 IGI-ma [.]
14. [.] ^dSAG.ME.GAR IGI-ma GÁN.BA MA.DA ^{hi-sib} KLMIN^{hi-pi}-ma a [. . .]
15. [. UD].14.KAM IGI-ma šá KA 2-i UD.14.KAM IGI-[. . .]
16. [. K]AM IGI-ma šá KA 2-i AN UD.13.KAM IGI [. . .]
17. [.] x PI(?)¹-šum KÚ : UH.ŠE.KÚ.E : tal-²-a-šú [. . .]
18. [.] ¹AN.MI¹ šá-niš ¹šum(?) x¹ ma šá KA 2-ⁱ¹ [. . .]
(remainder broken)

Translation

No translation is offered. See Notes and Remarks below.

Notes

Obverse

- 1 ff.: In this text, the sign consisting of two superimposed *winkelhaken*, which is here transcribed as a colon (:) divides commented entries and comments; the sign consisting of three superimposed *winkelhaken* and transcribed as three superimposed dots (:) divides one omen from the next.
- 1', 3': Compare 2 ŠU.SI AN.MI (b 9' and K 886 rev. 9; see Remarks below), 3 ŠU.SI AN.MI (b 10' and K 886 rev. 10).
- 7': The reading of BE-tim (here and on l. 17'), BE-tú (reverse 1) is probably *gamarti/u*, i.e., “total (eclipse).”
- 8': Compare K 886:1.
- 10': Parallels: DIŠ IGI.DU₈.A Sin ina maš-kán-šá nam-rat UD.1.KAM i-ba-il-ma, “If the first visibility of the Moon is bright in its position, (that means) it is very bright on the first day” (b 11); DIŠ IGI.DU₈.A Sin ina maš-kán-šú nam-ri : šá UD.1.KAM IGI-[. . .] (c 6).

- 11': Parallels: DIŠ UGU *maš-kán-šá iš*(gloss: *iš*)-*ta-qú BALA MAN-ni ina IGI.LÁ-ŠÚ AN.TA-ma*, “If it is higher than its position, the dynasty will change; (that means) it is high at its (first) visibility” (b 12); DIŠ UGU *maš-kán-šá iš-ta-qú : iš-ta-qu* : UD [. . .] (c 7).
- 12': Parallel: DIŠ *ina maš-kán-šá iš-ta-pil* UD-me *i-su-ti ina IGI.LÁ-ŠÚ KI.TA-ma*, “If it is low in its position, few days (for the ruler); (that means) it is low at its (first) visibility” (b 13); DIŠ *ina maš-kán-šá iš-ta-pil : šá* UD.1.KAM IGI-ma [. . .] (c 8).
- 14': Parallel: UD.DA.GÍD.DA : *šal-pu-ut-tum* (c 9).
- 15'-18': To be restored in accordance with the omens DIŠ *kíma bibbuli uš-ta-qir* URU EN.NUN <*ana*> KÚR GUD.UD *ina* UD.1.KAM *kíma šá* UD.28.KAM *ú-tan-na-at-ma*, “If it is as small(?) as (on) the new moon’s day, a border city will go over to the enemy; (that means) it is as dim on the first day as on the 28th day” (b 14–15); DIŠ *kíma bibbuli uš-ta-qir : ki-ma šá* [. . .] URU EN.NUN *ana* KÚR GUD.UD-*ít* (c 10–11), on the basis of the comment *libbū* UD.NÁ.A, “because of the new moon’s day,” and GUD.UD, the latter probably preceded by [*ú-tan-na*]-*at-ma*.

Reverse

- 1: Possibly to be restored [KI MAN] IGI-ma, from the parallel DIŠ [*ina qaba*]l *šamē ittaphā* NUN ŠÀ SIG IGI : *šá-qu-ma* KI MAN IGI-ma (b rev. 1) and DIŠ *ina qabal šamē ittaphā : UD.30.KA[M ina] 'MURUB₄' A[N . . .], ŠÀ.SIG : ni-ib-ri-tum : MIN : bu-bu-tum [. . .] LÚ^{meš}-ŠÚ : ni-ši-šú : [. . .] (c 12–14).*
- 2–3: Probably parallel to c 15; rev. 3 restored from the apodosis ERÍN^{meš} *ina* Ú.SAL.LA NÁ-*is*, with commentary NÁ : *ra-ba-ṣu* (c 16–17).
- 4–6: Probably parallel to c 18–20, based on U₅ occurring in both texts and in the comment *ár-ki-sà BE MI* (c 20) paralleled by EGIR-sà BE M[I] in rev. 6; the word (*w*)arkitu may designate the second (stationary point); see *arkitu*, meaning 3, and possibly refer to the “black star” (MUL.MI : *Zibānītu* ‘Libra’ b rev. 3, c 19), in this instance probably Saturn.
- 17: PI(?)*-ṣum* may also be read *tál-ṣum*.

Remarks

MMA 86.11.287A, B, C + MMA 86.11.503 is a commentary on Tablet IV of *Enūma Anu Enlil*, of which only the last few lines and two commentaries are preserved; see E. F. Weidner, “Die astrologische Serie Enūma Anu Enlil,” *AfO* 14 (1941/44), pp. 309ff. It is too fragmentary for translation, even though some lines may be restored from the two parallel commentaries published in autograph copy by Weidner, *AfO* 14 pls. XIII–XIV. While in the commentary Ki. 1904-10-9, 20 (= text b) stars and planets are brought in relation with the Moon at the beginning of the text as now preserved, in the Metropolitan Museum text these relations occur at the end: first Mercury (GUD.UD, rev. 5 and 6), then Mars (written AN, rev. 10, 11, and 16), and Jupiter (^dSÀG.ME.GAR, rev. 12–14), and even “one of the planets” (*ištēn ina libbi bibbi*, rev. 10). Partially similar texts are K. 886 (published in J. A. Craig, *Astrological-Astronomical Texts*, Assyriologische Bibliothek 14 [Leipzig, 1899] no. 11 and as *ACh Sin* 23), and Sm. 680 (= *ACh* suppl. 17). In the Notes to the MMA text the parallel lines from the two commentaries published in *AfO* 14, b = Ki. 1904-10-9, 20 and c = VAT 7813 are given.

A particular feature of the text is that it gives alternate explanations, introduced by *ša pî šanî* (written ŠÁ KA 2-i, l. 4' and passim), “according to another oral source” or by *ša pî šalšu* (rev. 11), “according to a third oral source.”

Nos. 72–77

Mathematical Texts

Jöran Friberg

The Metropolitan Museum collection of clay tablets with cuneiform inscriptions includes six small fragments of texts of mathematical content. These six fragments were first published by Neugebauer and Sachs in *MCT* in 1945. Five of them are inscribed exclusively with several lines of long sexagesimal numbers in place value notation. These five fragments are discussed in the first part of the present contribution. Two of the five, MMA 86.11.409 and MMA 86.11.410 (*MCT*, pp. 13, 15), have been recognized as belonging to “tables of reciprocals of larger extent.”¹ The three other fragments, MMA 86.11.406, .407, and .408 (*MCT*, p. 36), were classified as “varia” and have remained unexplained until now.

The sixth fragment, MMA 86.11.404, originally must have belonged to a Late Babylonian clay tablet with several mathematical problems, apparently of mixed content. It was published, with sparse comments, as “text X” in *MCT*, pp. 140–41 (transliteration), pl. 20 (hand copy), and pl. 43 (photograph). This fragment is discussed on pp. 307–11.

Additional fragments of the same general type as MMA 86.11.406–410 have been published since the appearance of *MCT*—ten in *LBAT*, three in Aaboe, “Seleucid Mathematical Tables,” and five in Britton, “Table of 4th Powers.” All of these new fragments belong to the collections of cuneiform tablets in the British Museum and are Late Babylonian texts from an unidentified archive in either Babylon or Sippar. Preliminary discussions of the *LBAT* fragments can be found in Vaiman, *SBM*, and in Aaboe, “Seleucid Mathematical Tables.” See also the unedited lecture notes from a conference in Baghdad, 1981, published in J. Friberg, “On the Big 6-Place Tables of Reciprocals and Squares from Seleucid Babylon and Uruk,” *Sumer* 42 (1986), pp. 81–87. For a recent survey see Britton, “Table of 4th Powers,” pp. 71–87.²

Against this background it is now possible to reconsider the five MMA fragments with long sexagesimal numbers in place value notation and to give a more detailed reconstruction and interpretation of their content than was possible before. A necessary prerequisite for this task, however, is an introductory discussion of some key concepts in this connection, such as “relative place value notation,” “regular sexagesimal numbers,” and “many-place tables of reciprocals.”

The Babylonian Relative Place Value Notation for Sexagesimal Numbers

In the majority of all Late Babylonian cuneiform texts from the first millennium B.C., whole numbers are expressed in “mixed sexagesimal-decimal” notation and thereby provided with unambiguously defined “absolute” values, as in the fictive example

$$2 \lim 3 \ me \ 1+\check{su} \ 25 = '2 thousand 3 hundred sixty and 25' = 2,385$$

Fractions are expressed in an equally unambiguous way, either as unit fractions and multiples of unit fractions—such as “a third,” “a fourth,” “four-fifths,” etc.—or by being named individually, as in the case of the fractions of the shekel. On the other hand, in Late Babylonian mathematical and astronomical texts, numbers of all kinds—both whole numbers and fractions—are normally expressed in the form of “sexagesimal numbers” in “relative place

value notation.³ Since the concept of sexagesimal numbers in relative place value notation is fundamental for any discussion of Late Babylonian many-place tables of reciprocals, etc., the precise meaning of this concept will be clarified here.

Consider first the simpler and more familiar concept of a sexagesimal integer in “absolute place value notation.” By this is meant an integer (a whole number) expressed in base 60 that is written in the form

$a = a_n \dots a_1 a_0$, where each one of the successive “sexagesimal places” from a_n to a_0
can be any one of the 60 “decimal double digits,” 00 = 0, 01 = 1, etc., up to 59.⁴

The value of such a number a is unambiguously defined by the equation

$$a = a_n \dots a_1 a_0 = a_n \cdot 60^n + \dots + a_1 \cdot 60 + a_0 \cdot 1.$$

So, for example, the “three-place” sexagesimal integer

$$1\ 12\ 30 (= a_2 a_1 a_0 \text{ where } a_2 = 1, a_1 = 12, a_0 = 30)$$

has the decimal value

$$1\ 12\ 30 = 1 \cdot 60^2 + 12 \cdot 60 + 30 \cdot 1 = 3600 + 720 + 30 = 4350.$$

The idea can be extended by also allowing negative powers of the base 60. Thus, a sexagesimal fraction in absolute place value notation is written in the form

$a = ;a_{-1} a_{-2} \dots a_{-n}$ where each one of the successive “sexagesimal places” from a_{-1} to a_{-n}
is any one of the decimal “double digits” 00 = 0, 01 = 1, etc., up to 59.

The value of such a fraction a is unambiguously defined by the equation

$$a = a_{-1} \cdot 1/60 + a_{-2} \cdot 1/60^2 + \dots + a_{-n} \cdot 1/60^n.$$

So, for example, the three-place sexagesimal fraction

$$;01\ 12\ 30 (= ;a_{-1} a_{-2} a_{-3}, \text{ where } a_{-1} = 1, a_{-2} = 12, a_{-3} = 30)$$

has the decimal value

$$;01\ 12\ 30 = 1 \cdot 1/60 + 12 \cdot 1/60^2 + 30 \cdot 1/60^3 = 1\ 12\ 30 \cdot 1/60^3 = 4350/216000 = 0.2013888\dots$$

Finally, a general sexagesimal number in absolute place value notation is the sum of a sexagesimal integer and a sexagesimal fraction written as two sequences of sexagesimal places separated by a “sexagesimal semicolon.” So, for instance, the three-place sexagesimal number 1 12;30 has the value

$$1\ 12;30 = 1 \cdot 60 + 12 + 30 \cdot 1/60 = 72\ 1/2.$$

With a different placement of the sexagesimal semicolon, a sexagesimal number with the same digits will have a different value. In other words,

the order of magnitude of a sexagesimal number in absolute place value notation is determined by
the placement of the sexagesimal semicolon and/or by the number of final or initial zeros.

Thus, for instance, if 1/60 is written as $1/60^{-1}$, $1/60^2$ as 60^{-2} , etc., then

$$1\ 12\ 30\ 00 = 1\ 12\ 30 \cdot 60 = 4350 \cdot 60^1 = 261000,$$

$$1\ 12\ 30 = 4350 \cdot 60^0 = 4350,$$

$$1\ 12;30 = 4350 \cdot 60^{-1} = 72\ 1/2,$$

$$1;12\ 30 = 4350 \cdot 60^{-2} = 29/24 = 1.208333\dots,$$

$$;01\ 12\ 30 = 4350 \cdot 60^{-3} = 29/1740 = 0.2013888\dots, \text{ etc.}$$

In contrast to this, a sexagesimal number in Babylonian “relative place value notation” can be thought of as a sexagesimal integer in absolute place value notation, multiplied by a not precisely indicated power of the base 60. Thus, in relative place value notation, a number such as 1 12 30 can be interpreted freely as $1 \cdot 60 + 12 + 30 \cdot 1/60 = 72\ 1/2$, or as $1 + 12 \cdot 1/60 + 30 \cdot 1/60^2 = 29/24$, etc., depending on the situation. In other words,

a sexagesimal number in relative place value notation may be thought of as a sexagesimal number in absolute place value notation, but without explicit information about the placement of the sexagesimal semicolon or about the number of final or initial zeros.⁵

Instead,

in Babylonian mathematical and astronomical texts the order of magnitude of a sexagesimal number in relative place value notation was normally either silently understood or indicated by the context.

It is likely that the Babylonian mathematicians and astronomers thought of a sexagesimal number in relative place value notation as an integral multiple of an understood but not explicitly mentioned power of 60 or 1/60. Historically, the origin of this idea was without doubt the use in Sumerian arithmetic and metrology of various kinds of ‘sixties’ and of the *gín* or shekel as a universal notation for ‘one-sixtieth.’

In the following section, sexagesimal numbers in relative place value notation will sometimes be referred to simply as “relative sexagesimal numbers.”

Regular Numbers and the Old Babylonian Standard Table of Reciprocals

In Babylonian mathematical texts division of a number a by a whole number n is normally carried out in two steps. First $1/n$, the “reciprocal” of n , is computed as a sexagesimal fraction, and then a divided by n is computed as $a \cdot 1/n$. The method works well as long as the division of 1 or a power of 60 by n is “possible,” in the sense that the division is exact, with no remainder. It is customary (in modern discussions of Babylonian mathematics) to say that n is a “regular sexagesimal number” when division of some power of 60 by n is possible in this sense. However, in relative place value notation for sexagesimal numbers, that is in the case of relative sexagesimal numbers, all powers of 60 are written in the same way, namely as the single digit ‘1.’⁶ Therefore, a simpler definition is that

a regular (relative) sexagesimal number is a number n for which exact division of ‘1’ by n is possible.

A special Babylonian name for regular sexagesimal numbers is not known and may never have existed. It is known, on the other hand, that what we call a regular sexagesimal number was characterized by Old Babylonian (and possibly even Sumerian) mathematicians as a sexagesimal number n for which another sexagesimal number called *igi n*, its ‘opposite’ (that is reciprocal) number, existed. In relative place number notation, this reciprocal *igi n* may be thought of as defined through the quasi-modern equation

$$n \cdot \text{igi } n = '1.'$$

Equivalently, in modern notations,

if n is a regular sexagesimal number and *igi n* its reciprocal,
then n and *igi n* can be thought of as two sexagesimal integers such that
 $n \cdot \text{igi } n = '1' = \text{some power of } 60 = \text{some power of } 2 \cdot 2 \cdot 3 \cdot 5$.

Precisely because the sexagesimal base 60 itself is equal to $2 \cdot 2 \cdot 3 \cdot 5$, it follows that a sufficiently high power of 60 can be divided exactly by any given integer that is a product of an arbitrary number of factors 2, 3, and 5, but not by numbers containing other prime factors. Therefore,

a regular (relative) sexagesimal number can be interpreted as (some power of 60 times)
an integer containing no other prime factors than 2, 3, or 5.

This observation makes it easy to compute the reciprocal of any given regular sexagesimal number. Take, for instance, the regular sexagesimal integer

$$n = 48 = 2 \cdot 2 \cdot 2 \cdot 2 \cdot 3 = 2^4 \cdot 3^1.$$

In view of this factorization it is obvious that the second power of 60 can be divided exactly by 48. Indeed,

$$60^2 = (2 \cdot 2 \cdot 3 \cdot 5)^2 = 2^4 \cdot 3^2 \cdot 5^2.$$

Therefore,

$$\text{igi } 48 = 60^2/48 = (2^4 \cdot 3^2 \cdot 5^2) / (2^4 \cdot 3^1) = 3^1 \cdot 5^2 = 75 = 1\ 15.$$

Conversely, the reciprocal number 1 15 is itself a regular sexagesimal integer, and

$$\text{igi } 1\ 15 = 48.$$

because (of course)

if $48 \cdot 1\ 15 = '1' (= 60^2)$, then also $1\ 15 \cdot 48 = '1' (= 60^2)$.

The well-known Old Babylonian “standard table of reciprocals” (see *MCT*, p. 11) enumerates all pairs of “1-place” regular sexagesimal numbers and their reciprocals, from $\text{igi}\ 2 = 30$ to $\text{igi}\ 54 = 1\ 06\ 40$ and(!) $\text{igi}\ 1 = 1$.⁷ At the end of the table there were additional lines for $\text{igi}\ 1\ 04 = 56\ 15$ and $\text{igi}\ 1\ 21 = 44\ 26\ 40$ (sometimes also, redundantly, for $\text{igi}\ 1\ 12 = 50$, $\text{igi}\ 1\ 15 = 48$, and $\text{igi}\ 1\ 20 = 45$). It is easy to check that, for instance, in the most complicated of the enumerated cases,⁸

$$1\ 21 = (81 =) 3^4 \text{ and, therefore, } \text{igi}\ 1\ 21 = '1'/3^4 = '20'/3^3 = '6\ 40'/3^2 = '2\ 13\ 20'/3 = '44\ 26\ 40.'$$

The reason why the “2-place” regular numbers 1 04 and 1 21 were added to the list of regular 1-place numbers in the standard table of reciprocals is probably that $1\ 04 = 64 = 2^5$ and $1\ 21 = 81 = 3^4$. Thus, both numbers are high powers of 2 and 3, yet close to ‘1.’

The whole standard table of “pairs of reciprocals” (n , $\text{igi}\ n$) is reproduced below for easy reference. The tabulated numbers n proceed in ascending order from 2 to 1 21.

2 30	8 7 30	16 3 45	27 2 13 20	45 1 20	1 04 56 15
3 20	9 6 40	18 3 20	30 2	48 1 15	(1 12 50)
4 15	10 6	20 3	32 1 52 30	50 1 12	(1 15 48)
5 12	12 5	24 2 30	36 1 40	54 1 06 40	(1 20 45)
6 10	15 4	25 2 24	40 1 30	1 1	1 21 44 26 40

The table is written here in a simplified form and has to be understood as meaning that

$\text{igi}\ 2 = 30$, $\text{igi}\ 3 = 20$, $\text{igi}\ 4 = 15$, $\text{igi}\ 5 = 12$, etc.

It is easy to check by inspection that, indeed, all regular integers between 1 and 59 and their reciprocals are included in this table. A more sophisticated way of making sure that there are no “gaps” or missing pairs of reciprocals in the table is to look at the representation of pairs in the table as points in what may be called a “triaxial index grid.”⁹ As pointed out above, every regular sexagesimal number can be interpreted as an integer with no other prime factors than 2, 3, and 5. The general form of such an integer is

$n = 2^r \cdot 3^s \cdot 5^t$, where the exponents r, s, t are positive integers,

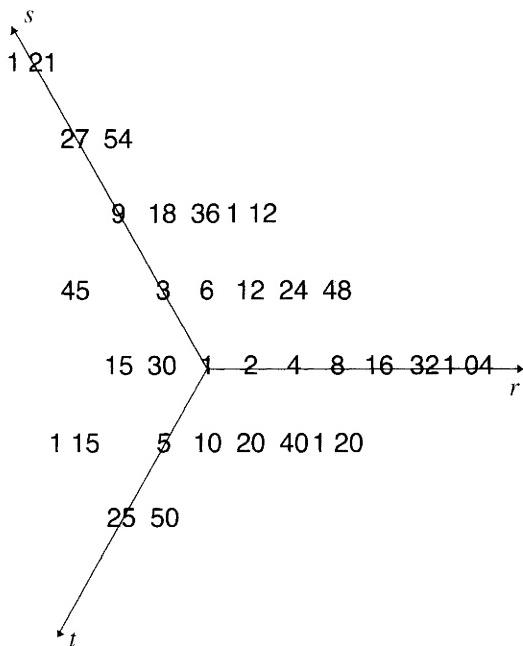
together forming the “index triple for n ,” here called $I(n) = r, s, t$.

Thus, for instance,

$I(2) = 1, 0, 0$	$I(8) = 3, 0, 0$	$I(16) = 4, 0, 0$	$I(27) = 0, 3, 0$	$I(45) = 0, 2, 1$	$I(1\ 04) = 6, 0, 0$
$I(3) = 0, 1, 0$	$I(9) = 0, 2, 0$	$I(18) = 1, 2, 0$	$I(30) = 1, 1, 1$	$I(48) = 4, 1, 0$	$I(1\ 12) = 3, 2, 0$
$I(4) = 2, 0, 0$	$I(10) = 1, 0, 1$	$I(20) = 2, 0, 1$	$I(32) = 5, 0, 0$	$I(50) = 1, 0, 2$	$I(1\ 15) = 0, 1, 2$
$I(5) = 0, 0, 1$	$I(12) = 2, 1, 0$	$I(24) = 3, 1, 0$	$I(36) = 2, 2, 0$	$I(54) = 1, 3, 0$	$I(1\ 20) = 4, 0, 1$
$I(6) = 1, 1, 0$	$I(15) = 0, 1, 1$	$I(25) = 0, 0, 2$	$I(40) = 3, 0, 1$	$I(1) = 0, 0, 0$	$I(1\ 21) = 0, 4, 0$

In the triaxial index grid the exponents r, s, t are counted along three axes at equal angles to each other, dividing the plane in three equal parts. In figure 1 below, it is shown how, for instance, all the 30 regular numbers n in the standard (one-place) table of reciprocals can be represented by their indices in the grid. Note how the indices of all one-place numbers in the table are situated within a certain triangle, the “one-place triangle.”

Figure 1. Points in the Index Grid Representing the Standard Table of Reciprocals



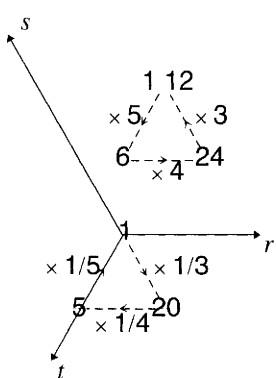
In this *triaxial index grid*, powers of 2 are represented by index points proceeding to the right, in the direction of the r axis. Similarly, powers of 3 are represented by index points proceeding diagonally upward to the left, in the direction of the s axis and powers of 5 by index points proceeding diagonally downwards to the left, in the direction of the t axis.

A regular integer n with the index triple r, s, t is represented in the grid by the point that is reached if one starts at the origin and then proceeds along a broken path r steps in the r direction, s steps in the s direction, and t steps in the t direction.

The indicated triangle may be called the “one-place index triangle.”

An amazing property of the triaxial index grid is that it can be used to represent in a unique way not only all regular sexagesimal integers but also, more generally, all regular relative sexagesimal numbers. Why this is so is shown in the explanatory diagram below:

Figure 2. The Index Grid and Regular Numbers in Relative Place Value Notation



In the upper part of this diagram it is shown how the index points representing the regular numbers 6, $6 \cdot 4 = 24$, and $24 \cdot 3 = 1\ 12$ are situated at the corners of an equilateral triangle. Proceeding from the index point representing $1\ 12$ in the direction of the t axis one finds the point representing $1\ 12 \cdot 5 = 6\ 00 = '6'$ in relative place value notation. The example shows that the representation of regular sexagesimal numbers by index points in the grid is not affected by any multiplication of the numbers by $60 = 4 \cdot 3 \cdot 5$.

A similar example in the lower part of the diagram shows that the same index point represents 1 and $1/3 \cdot 1/4 \cdot 1/5 = 1/60$.

Another interesting property of the triaxial index grid is related to the obvious fact that

if $n = 2^r \cdot 3^s \cdot 5^t$ is a regular sexagesimal number, then its reciprocal is $\text{igi } n = 2^{-r} \cdot 3^{-s} \cdot 5^{-t}$.

Therefore,

if the index triple for n is $I(n) = r, s, t$, then the index triple for its reciprocal is $I(\text{igi } n) = -r, -s, -t$.

This means that in the index grid

the points representing n and $\text{igi } n$ are situated symmetrically on opposite sides of the origin 0, 0, 0.

It may seem confusing that three axes are needed for the representation of points in a two-dimensional grid. As a matter of fact, two axes are enough. Indeed, as shown by the example in the lower part of the diagram in Figure 1 above, the regular numbers 5 and $5/60 = 1/12 = 1/4 \cdot 1/3$ are represented by the same point in the index grid. They are also indistinguishable when interpreted as *relative sexagesimal numbers*. Therefore,

$$\text{if } n = 2^r \cdot 3^s \cdot 5^t, \text{ then also } n = 2^r \cdot 3^s \cdot 12^{-t} = 2^{r-t} \cdot 3^{s-t}.$$

What this means is that relative regular sexagesimal numbers cannot be represented in a unique way as products of powers of 2, 3, and 5, but that they can be represented uniquely as products of powers of just 2 and 3. In terms of the index grid every given relative regular sexagesimal number corresponds to a point that is reached from the origin by proceeding first a certain number of steps in the direction of the positive or negative r axis, then another number of steps in the direction of the positive or negative s axis. In other words, from now on we may assume that $t = 0$ and that simply

$$I(n) = r, s \text{ and } I(igi\ n) = -r, -s.$$

From now on, there are only two exponents in each “index pair,” and the former triaxial index grid may be replaced by an equivalent but conceptually simpler “biaxial index grid.” The transition to the new mode of representation, with index pairs instead of index triples, is easy to accomplish. For instance, instead of factorizing the regular number 30 as $30 = 2 \cdot 3 \cdot 5$, one may now factorize it (as a relative sexagesimal number) in the following way:

$$30 = 2 \cdot 3 \cdot 5 = 2 \cdot 3 \cdot 1/4 \cdot 1/3 = 2^{-1}, \text{ so that } I(30) = -1, 0 \text{ instead of, as before, } 1, 1, 1.$$

In the case of the regular numbers n occurring in the standard (1-place) table of reciprocals, for instance, the corresponding index pairs are the following:

$I(2) = 1, 0$	$I(8) = 3, 0$	$I(16) = 4, 0$	$I(27) = 0, 3$	$I(45) = -2, 1$	$I(104) = 6, 0$
$I(3) = 0, 1$	$I(9) = 0, 2$	$I(18) = 1, 2$	$I(30) = -1, 0$	$I(48) = 4, 1$	$I(112) = 3, 2$
$I(4) = 2, 0$	$I(10) = -1, -1$	$I(20) = 0, -1$	$I(32) = 5, 0$	$I(50) = -3, -2$	$I(115) = -4, -1$
$I(5) = -2, -1$	$I(12) = 2, 1$	$I(24) = 3, 1$	$I(36) = 2, 2$	$I(54) = 1, 3$	$I(120) = 2, -1$
$I(6) = 1, 1$	$I(15) = -2, 0$	$I(25) = -4, -2$	$I(40) = 1, -1$	$I(1) = 0, 0$	$I(121) = 0, 4$

An Algorithm for the Generation of Pairs of Reciprocal Regular Numbers

CBS 29.13.21 (*MCT*, pp. 13–15) is a fragment of a large Old Babylonian table text with five examples of the application of a certain “doubling and halving algorithm.” The algorithm is based on the simple observation that

$$\text{if } a \cdot b = '1,' \text{ then also } 2a \cdot b/2 = '1.'$$

The most elaborate application of the algorithm starts with an “initial pair of mutually reciprocal regular sexagesimal numbers” constituted by the regular number 2 05 (= 125 = 5^3) and its reciprocal $igi\ 2\ 05 = 28\ 48$ (= 12^3). It then proceeds by repeatedly doubling 2 05 and halving 28 48. The result is a sequence of 30 pairs of mutually reciprocal regular sexagesimal numbers, namely:

$$\begin{array}{lll} 2\ 05 & 28\ 48 & I(2\ 05) = (0, 0, 3 =) \quad -6, -3, \\ 4\ 10 & 14\ 24 & I(4\ 10) = (1, 0, 3 =) \quad -5, -3, \\ 8\ 20 & 7\ 12 & I(8\ 20) = (2, 0, 3 =) \quad -4, -3, \\ \text{etc.} & \text{etc.} & \end{array}$$

The four other applications of the “doubling and halving algorithm” exhibited on CBS 29.13.21 start with the following four initial pairs:

$$\begin{array}{lll} 2\ 40 & 22\ 30 & I(2\ 40) = (5, 0, 1 =) \quad 3, -1, \\ 1\ 40 & 36 & I(1\ 40) = (2, 0, 2 =) \quad -2, -2, \end{array}$$

1 04 56 15 I(1 04) = (6, 0, 0 =) 6, 0,
 4 03 14 48 53 20 I(4 03) = (0, 5, 0 =) 0, 5.

As these examples indicate, the Babylonian doubling and halving algorithm can be used to generate an unlimited number of examples of regular sexagesimal numbers. In addition, the nature of the algorithm makes it easy to keep track of the factorizations of the successively computed regular numbers.

Late Babylonian Many-Place Tables of Reciprocals, Lists of Squares, etc.

The flowering of mathematical astronomy in the Late Babylonian period (roughly the second half of the first millennium B.C.) is documented by a wealth of preserved astronomical cuneiform table texts (and a few explanatory “procedure texts”; see, in particular, Neugebauer, *ACT* 1–3; see text No. 8). These Late Babylonian astronomical texts give witness to an amazing ability to invent ingenious mathematical algorithms and to perform complicated arithmetical operations with long sexagesimal numbers in relative place value notation. Therefore, it is not surprising that one of the favorite advanced topics of the reestablished mathematical tradition of this period was the compilation of “many-place tables of reciprocals” for regular sexagesimal numbers. The usefulness of such tables is far from obvious, although it is conceivable that they were used as division tables. (If so, the values of reciprocals of nonregular sexagesimal numbers must have been obtained through linear interpolation.)

The first known example of a table of this type, AO 6456, was published by Thureau-Dangin in *TCL* 6, 31. It was subsequently transliterated and explained by Neugebauer in *MKT* 1, pp. 14–22, and in “Sexagesimalsystem und babylonische Bruchrechnung IV,” *Quellen und Studien zur Geschichte der Mathematik Astronomie und Physik*, pt. B, 2 (1935), pp. 199–210. It is a very well preserved Seleucid table of 157 regular relative sexagesimal numbers n and their reciprocals, proceeding from $\text{igi } 1 = 1$, $\text{igi } 1 00 16 53 53 20 = 59 43 10 50 52 48$, etc., to $\text{igi } 2 57 46 40 = 20 15$, and finally $\text{igi } 3 = 20$. The tabulated numbers n can be interpreted as appearing in ascending order, proceeding toward ever greater values, if it is assumed that their common order of magnitude in absolute values is restricted to the range from 1 to 3.¹⁰ According to this interpretation the first three pairs of the table, for instance, can be read

1 1
 1;00 16 53 53 20 ; 59 43 10 50 52 48
 1;00 40 53 20 ; 59 19 34 13 07 30

In nearly each line of this table either n or $\text{igi } n$ is “six-place,” that is a relative sexagesimal number with (at most) six double digits. The single exception is $3^{23} = 2 01 04 08 03 (00) 27$, a seven-place number with a seventeen-place reciprocal. (Note the many zeros in this number, which actually takes less space on the clay tablet than an ordinary six-place number.)

An even more extensive many-place table of reciprocals, recently published, is W 23283 = von Weiher, *SptU* 4, 174. It is Late Babylonian but pre-Seleucid, and it proceeds from ‘1’ to ‘4,’ more precisely from $\text{igi } 1 = 1$ to $\text{igi } 4 = 15$. It does not display the same set of included pairs of reciprocals as AO 6456, and it contains far fewer errors. Therefore it is not likely that W 23283 and AO 6456 are copies of the same original table.

A third many-place table of reciprocals, from ‘1’ to ‘3,’ was published by W. Al-Jadir in “Une bibliothèque et ses tablettes,” *Archeologia* 224 (1987), pp. 18–27, in the form of a rather murky photo of the reverse. It was found in a recently excavated Late Babylonian library of cuneiform texts in Sippar. The set of included pairs in this text (Sippar 2175/12; J. Friberg and F. N. H. Al-Rawi, in preparation) is different from that of AO 6456 and, although much less so, from that of W 23283.

At the present time (2004) there are ten known fragments (or joins of fragments) and three whole tablets with many-place tables of reciprocals. Closely related to these are seven additional fragments (or joins of fragments)

containing smaller or larger parts of a “many-place list of squares of regular sexagesimal numbers.” Note that if n is, for instance, a regular six-place number, then the square $\square n$ is a regular twelve-place number, often occupying as much space in a line on a clay tablet as the pair of reciprocals n , $igi\ n$.

Even more surprising than the existence of fragments with parts of a many-place list of squares of regular sexagesimal numbers is the newly established existence of fragments with parts of a similar “many-place list of squares of regular sexagesimal numbers.” The first such fragment, BM 55557, was published in Britton, “Table of 4th Powers,” pp. 71–82. It contains, except for many lost lines in the middle part of the text, squares of squares from the initial 21-place number

$$\begin{aligned} & 1\ 04\ 14\ 56\ 27\ 48\ 28\ 07\ 55\ 21\ 34\ 22\ 30\ 13\ 23\ 22\ 30\ 52\ 44\ 03\ 45 \\ & = \square(1\ 02\ 05\ 17\ 25\ 04\ 28\ 03\ 59\ 03\ 45) = \square\square(1\ 01\ 02\ 06\ 33\ 45) \end{aligned}$$

to the final seventeen-place number

$$\begin{aligned} & 15\ 13\ 27\ 47\ 53\ 42\ 32\ 30\ 13\ 52\ 11\ 24\ 46\ 25\ 11\ 06\ 40 \\ & = \square(3\ 54\ 06\ 38\ 21\ 14\ 04\ 26\ 40) = \square\square(1\ 58\ 31\ 06\ 40). \end{aligned}$$

A second fragment of the same type is BM 32584 (J. Friberg and F. N. H. Al-Rawi, in preparation).

Following here is a brief survey of all known Late Babylonian fragments or whole tablets concerned with many-place regular sexagesimal numbers. Within each category of texts the fragments or tablets are listed in ascending order with respect to their museum numbers and are labeled by capital letters. Joined fragments are listed together. In particular, the five MMA fragments mentioned above are listed as fragments I and J of many-place tables of regular reciprocals from ‘1’ to ‘2.’

The Corpus of Late Babylonian Texts Exhibiting Many-Place Regular Sexagesimal Numbers

A standard table of reciprocals, followed by a table of squares of three-place regular sexagesimal numbers, from $\square 1\ 02\ 30$ to $\square 45$:

- A: BM 34592 = Sp 2, 65+ (*LBAT* 1637; Vaiman, *SBM*, A; Aaboe, “Seleucid Mathematical Tables,” pp. 79–83, IV)

Ten fragments of many-place tables of regular reciprocals, with n between 1 and 2:

- A: BM 34577 = Sp 2, 49 (*LBAT* 1635; Vaiman, *SBM*, F)
- B: BM 34596 = Sp 2, 70 + 82-7-4, 128 (*LBAT* 1633; Vaiman, *SBM*, D)
- C: BM 34612 = Sp 2, 91 (*LBAT* 1631; Vaiman, *SBM*, B)
- D: BM 34635 = Sp 2, 118 (*LBAT* 1634; Vaiman, *SBM*, E)
- E: BM 34762 = Sp 2, 255 (*LBAT* 1632; Vaiman, *SBM*, C)
- F: BM 76984 = 83-1-18, 2356+ (Britton, “Table of 4th Powers,” pp. 83–84, A)
- G: BM 77051 = 83-1-18, 2427 (Britton, “Table of 4th Powers,” pp. 83–85, B)
- H: BM 78079 = 86-5-12, 4 (Britton, “Table of 4th Powers,” pp. 83–85, C)
- I: MMA 86.11.407 + .408 + .409 (*MCT*, p. 36; J. Friberg, in CTMMA 2, p. 300)
- J: MMA 86.11.410 + Liverpool 29.11.77.34 (*MCT*, p. 15; J. Friberg, in CTMMA 2, p. 301)

A fragment of a many-place table of regular reciprocals, with n between ‘4’ and ‘8’(?):

- K: BM 41101 = 81-4-28, 648 (Aaboe, “Seleucid Mathematical Tables,” p. 80, I)

Two many-place tables of regular reciprocals, with n between 1 and 3:

- S: IM x = Sippar 2175/12 (J. Friberg and F. N. H. Al-Rawi, in preparation)

- W: AO 6456 (TCL 6, 31; *MKT* 1, pp. 14–22)

A many-place table of regular reciprocals, with n between 1 and 4:

- U: W 23283 (von Weiher, *SpTU* 4, 174; J. Friberg, in preparation)

Seven fragments of many-place lists of regular squares from $\square 1$ to $\square 2$:

- A: BM 32178 = 76-11-7, 1905+ (Aaboe, "Seleucid Mathematical Tables," pp. 80–81, III)
B: BM 33567 = Rm 4, 123 (Aaboe, "Seleucid Mathematical Tables," p. 80, II)
C: BM 34578 = Sp 2, 50 (*LBAT* 1641; Vaiman, *SBM*, J; Aaboe, "Seleucid Mathematical Tables," p. 86, VIII)
D: BM 34714 = Sp 2, 203 (*LBAT* 1639; Vaiman, *SBM*, I; Aaboe, "Seleucid Mathematical Tables," p. 86, VII)
E: BM 34764 = Sp 2, 257 (*LBAT* 1640; J. Friberg, "On the Big 6-place Tables of Reciprocals and Squares from Seleucid Babylon and Uruk," *Sumer* 42, p. 85)
F: BM 34875 = Sp 2, 382 (*LBAT* 1638; Vaiman, *SBM*, H; Aaboe, "Seleucid Mathematical Tables," p. 86, VI)
BM 45668 = SH 81-7-6, 63 (*LBAT* 1636; Vaiman, *SBM*, G; Aaboe, "Seleucid Mathematical Tables," pp. 83–86, V)
G: BM 99633 = 84-2-11, 1995 (Britton, "Table of 4th Powers," p. 86, D)

Two fragments of many-place lists of regular squares of squares from $\square \square 1$ to $\square \square 2$:

- A: BM 32584 = 76-11-17, 2327 (J. Friberg and F. N. H. Al-Rawi, in preparation)
B: BM 55557 = 82-7-4, 147+ (Britton, "Table of 4th Powers," pp. 71–82)

An explicit computation of $\square \square 3^{23}$, the fourth power of a seven-place regular number¹¹:

- A: BM 34601 = Sp 2, 76 + 759 (*LBAT* 1644; J. Friberg, in preparation)

Three examples of the use of a factorization algorithm for regular sexagesimal numbers:

- A: W 23021 (von Weiher, *SpTU* 4, 174; J. Friberg, "A Late Babylonian Factorization Algorithm"; see Selected Bibliography, p. 314)
B: BM 34958 = Sp 2, 479 (*LBAT* 1642; J. Friberg, in preparation)
C: BM 34907 = Sp 2, 421 (*LBAT* 1643; J. Friberg, in preparation)

All many-place regular sexagesimal numbers n occurring in at least one of the "many-place tables of reciprocals with n between 1 and 2" listed above can be thought of as arranged together in a table, with the tabulated numbers appearing in ascending order, from 1 and 1;00 16 53 53 20 to 1;59 26 21 41 45 36. In Table 1 on page 297 the space available was not enough to show all these regular numbers (see however Table 2 on page 299). Instead their index pairs r, s are listed in the first column, beginning with the indices 0, 0 for $n = 1$ and -18, -11 for $n = 1;00 16 53 53 20$.¹² In the third column of Table 1 are indicated all attestations of regular sexagesimal numbers n with the listed index pairs in the fragments A–J of many-place tables of regular reciprocals or in the whole tablets S, U, and W. In the fourth column are indicated all indirect attestations of the same numbers n in any of the fragments A–G of tables of squares $\square n$, and in the fifth column all similarly indirect attestations of the numbers n in the fragments A–B of tables of squares $\square \square n$. In the seventh column are shown the number of sexagesimal places p and q in n and in $\text{igi } n$, respectively, and in the sixth column the total number of places $p + q$ in n and $\text{igi } n$ together. For instance, in the last line of table 1, $r, s = 18, 0$ is the index of $n = 1 12 29 04$ (cf. Table 2 below), the corresponding reciprocal number is $\text{igi } n = 49 26 18 30 56 15$, the two individual place numbers are $p = 4$ and $q = 6$, and the total place number is $p + q = 4 + 5 = 10$.

Table 1. Attested Many-Place Regular Numbers from 1 to 2 (Beginning)

$r s$	line	$n, \text{igi } n$			$\square n$	$\square \square n$	$p+q$	$p q$
0 0	0	.	.	U W	.	.	2	1 1
-18 -11	W			W			12	6 6
15 -2	W			W			11	5 6
-2 5	1	.	.	U W	.	.	7	3 4
-20 -6	2	.	.	U W	.	E	11	6 5
13 3	3	.	.	U W	.	?	8	4 4
-4 10	4**	.	.	U -	.	E	13	5 8
-22 -1	—*						12	8 4
-5 -8	5	.	.	U W	B	E	9	6 3
11 8	6	.	.	U W	B	E	9	5 4
-7 -3	7	.	.	U W	B	?	5	3 2
8 -5	8	.	.	I U	B	?	A B	10 6 4
-9 2	9	.	.	I U	B	.	A B	8 5 3
6 0	10	.	.	I U	B	.	A -	4 2 2
-12 -11	W*			W			12	7 5
4 5	11	.	.	I U	B	.	A B	6 3 3
-14 -6	12	.	.	I U	B	.	A B	8 4 4
19 3	W			W			11	5 6
2 10	13*	.	.	I U	W	G	A B	11 4 7
1 -8	14*	.	.	I U	W	G	A B	10 7 3
-16 -1	15	.	.	I U	W	G	A B	9 6 3
17 8	16	.	.	I -	-	G	- B	10 6 4
-1 -3	17	.	.	I U	W	B	G	?? B
-3 2	18	.	.	I U	W	B	G	? B
-21 -9	—						12	6 6
12 0	19	.	.	I S U	W	B	A B	7 3 4
-5 7	20	.	.	I S U	W	.	?? B	11 5 6
-6 -11	—*						12	8 4
10 5	21	.	.	I S U	W	.	B	6 4 2
-8 -6	22	.	.	I S U	W	F	-	7 4 3
8 10	23	.	?	I - ?	-	F	B	11 5 6
-10 -1	24	.	D	I S U	W	F	B	6 4 2
5 -3	25	.	D	I S U	W	F	-	7 4 3
-12 4	26	.	D H	I S U	W	F	B	11 6 5
3 2	27	.	D H	S U	W	F	-	3 2 1
-15 -9	—						10	5 5
18 0	28	C D	H	S U	W	F	-	10 4 6
etc.								

In the second column of Table 1, a double asterisk ** marks the case when the “total place number” $p + q$ exceeds 12, and a single asterisk * marks the cases when one of the “individual place numbers” p and q exceeds 6 while $p + q$ does not exceed 12. The entries marked W correspond to the cases when the number n occurs, directly or

indirectly, only in the table of reciprocals W = AO 6456. In the remaining part of Table 1, not shown here, there are many cases of entries in the fourth column marked both W and ** but only one more case of an entry marked ** but not W. For this and other reasons it is clear that the table of reciprocals W does not fit into the general pattern; it cannot be closely related to all the other texts mentioned in Table 1.

With this exception, and possibly a couple of others not visible in the shown part of Table 1, all the known many-place tables of reciprocals, squares, or squares of squares seem to have a common origin.¹³ To see this, one must first make the observation that if the three exceptional texts are removed from consideration, as well as the two mentioned entries marked ** but not W in the fourth column, then in all remaining cases the total place number $p + q$ in Table 1 never exceeds 12. It is not difficult to determine (see Figure 5 below) that there exist precisely 130 “total twelve-place” regular sexagesimal pairs with n between 1 and 2, that is pairs for which $p + q$ does not exceed 12. Of these, precisely 105 are “double six-place,” in the sense that p and q both do not exceed 6. Where the text of any one of the fragments (except two) or whole tablets (except W) is preserved, 87 of the possible 105 double six-place cases are nearly always present, while the remaining 18 are always missing. A dash marks these missing cases in the second column of Table 1. Similarly, of the 25 possible total twelve-place but not double six-place cases, 11 are nearly always present, if preserved, while 14 are always missing. A dash-plus-asterisk marks these cases in the second column.

The fact that so many of the texts considered share the same set of “missing cases” makes the conclusion inevitable that all the fragments A–J (except D) of many-place tables of regular reciprocals with n between ‘1’ and ‘2’ are excerpts from a single “First Tablet” of a certain original total twelve-place table of regular reciprocals from Babylon or Sippar, closely related to the tables on the whole tablets S and U. It is possible to make a complete reconstruction of this presumed First Tablet, as shown in Table 2 below. In the fourth and fifth columns of Table 2 (of which only the beginning is shown here) are listed all total twelve-place pairs of regular sexagesimal reciprocals, with n ascending from 1 to 2. In the first column the corresponding index pairs I(n) are listed, and in the second column the successive line numbers of the reconstructed First Tablet are mentioned. The pairs n , igi n that were “missing” in the original First Tablet are included in the reconstruction, too, marked by gaps in the line numbering.

The Five MMA Fragments: Reconstructions and Conform Transliterations

In light of what has been said above, it is not difficult to see that the fragment MMA 86.11.409, which is correctly identified in *MCT*, p. 13 as part of a table of reciprocals, and the two fragments MMA 86.11.407 and .408, which are classed there (*MCT*, p. 36) as “varia,” actually form an indirect join, as no surfaces can be matched exactly. The reconstruction suggested in Figure 3 below is presented in the form of “conform and position-preserving transliteration,” in which the transliterations of the individual signs have been placed in their correct positions within the outlines of the fragments. Generally, one advantage of using conform and position-preserving transliterations is that any possibility of joins becomes evident. More importantly, the correctness of the reconstruction of broken-off parts of many-place sexagesimal numbers can be tested, because incorrectly reconstructed numbers would not easily fit into or fill out the available space.

Note that the conform transliterations used here for the signs \triangleright and \nwarrow are ‘1°’ and ‘1’ rather than ‘10’ and ‘01,’ etc. This was done in order to ensure flexibility and avoid ambiguity, and because, as a matter of fact, place value notation is not used in the cuneiform texts for the decimal double digits themselves. The transliterations ‘1°,’ ‘2°,’ etc., are suitable also because \nwarrow is a unit, although of higher order, in the sexagesimal system.

Table 2. The Reconstructed First Tablet of a Total Twelve-place Table of Reciprocals (beginning)

<i>r s</i>	lines	texts	$n = 2^r \cdot 3^s$	igi <i>n</i>
0 0	0	· · ·	1	1
-18 -11	—		1 00 16 53 53 20	59 43 10 50 52 48
15 -2	—		1 00 40 53 20	59 19 34 13 07 30
-2 5	1	· · ·	1 00 45	59 15 33 20
-20 -6	2	· · ·	1 01 02 06 33 45	58 58 56 38 24
13 3	3	· · ·	1 01 26 24	58 35 37 30
-4 10	4**	· · ·	1 01 30 33 45	58 31 39 35 18 31 06 40
-22 -1	—*		1 01 47 53 08 40 18 45	58 15 15 12
-5 -8	5	· · ·	1 01 43 42 13 20	58 19 12
11 8	6	· · ·	1 02 12 28 48	57 52 13 20
-7 -3	7	· · ·	1 02 30	57 36
8 -5	8	· · c	1 03 12 35 33 20	56 57 11 15
-9 2	9	· b c	1 03 16 52 30	56 53 20
6 0	10	· b c	1 04	56 15
-12 -11	—*		1 04 18 01 28 53 20	55 59 13 55 12
4 5	11	· b c	1 04 48	55 33 20
-14 -6	12	· b c	1 05 06 15	55 17 45 36
19 3	—		1 05 32 09 36	54 55 53 54 22 30
2 10	13*	· b c	1 05 36 36	54 52 10 51 51 06 40
1 -8	14*	· b c	1 05 50 37 02 13 20	54 40 30
-16 -1	15	· b c	1 05 55 04 41 15	54 36 48
17 8	16	· b c	1 06 21 18 43 12	54 15 12 30
-1 -3	17	· b c	1 06 40	54
-3 2	18	· b c	1 07 30	53 20
-21 -9	—		1 07 49 00 37 30	53 05 02 58 33 36
12 0	19	· b c	1 08 16	52 44 03 45
-5 7	20	· b c	1 08 20 37 30	52 40 29 37 46 40
-6 -11	—*		1 08 35 13 34 48 53 20	52 29 16 48
10 5	21	a b c	1 09 07 12	52 05
-8 -6	22	a b c	1 09 26 40	51 50 24
8 10	23	a · c	1 09 59 02 24	51 26 25 11 06 40
-10 -1	24	a · ·	1 10 18 45	51 12
5 -3	25	a · ·	1 11 06 40	50 37 30
-12 4	26	a · ·	1 11 11 29 03 45	50 34 04 26 40
3 2	27	· · ·	1 12	50
-15 -9	—		1 12 20 16 40	49 45 59 02 24
18 0	28	· · ·	1 12 49 04	49 26 18 30 56 15
etc.	etc.		etc.	etc.

The sign \nwarrow in the texts is transliterated as a colon. This sign is a graphical variant of a cuneiform “separation sign”/“sexagesimal zero.” Depending on the circumstances, it plays the role of either a colon, a quotation mark, etc., or a sexagesimal zero. (A sexagesimal zero corresponds in most cases to a decimal double-zero ‘00’ or ‘· 0 0 ·,’ that is two successive vacant decimal digits.) Reconstructed edges of clay tablets and reconstructed (parts of) sexagesimal numbers are indicated by dashed lines and gray color in the conform and position-preserving transcriptions.

The proposed reconstruction of the indirect join MMA 86.11.407 (+) MMA 86.11.408 (+) MMA 86.11.409 shown in Fig. 4 is based on the assumption that the readable faces of the three fragments originally formed part of the obverse of a copy of the First Tablet of the original table of reciprocals. (Although a small portion of the reverse of MMA 86.11.409 still remains, only uninformative traces remain of whatever was inscribed on it.) In the third column

of Table 2 the letters a, b, and c refer to any attestations in the three fragments MMA 86.11.407, 86.11.408, or 86.11.409, respectively, of (some part of) a pair of reciprocals from the First Tablet.

72.

MMA 86.11.407

Plate 97

H. 31 mm W. 28 mm Th. 13 mm

Fragment of a Table of Reciprocals
Later 1st millennium

73.

MMA 86.11.408

Plate 97

H. 67 mm W. 46 mm Th. 32 mm

Fragment of a Table of Reciprocals
Later 1st millennium

74.

86.11.409

Plate 98

H. 80 mm W. 48 mm Th. 32 mm

Fragment of a Table of Reciprocals
Later 1st millennium

Figure 3. Conform Position-Preserving Transliteration of MMA 86.11.407 (+) MMA 86.11.408 (+) MMA 86.11.409

	1	2	3	4	5
1	1 : 4° 5	1 1 : 2 6 3° 3 4° 5	1 1 2° 6 2° 4	1 1 3° 3 3 4° 5	1 1 4° 3 4° 2 1° 3 2°
9	1 2 1° 2 2° 8 4° 8	1 2 3	1 3 1° 2 3° 5.. 3 3 2	1 3 1° 6 5° 2 3°	1 4
10	1 4 4° 8	1 5 6 1° 5	1 5 3° 6 3° 6	1 5 3° 7 2 1° 3 2	1 5 5 4 4° 1 1° 5
17, 18	1 6 2° 1 1° 8 4 3 1° 2	1 6 4° : 5° 4 : 1 7 3	1 8 1° 6	1 8 2° 3° 7 3°	1 9 7 1 2 5 2 5 : 1 9 2
20	1 8 2° 3° 7 3°	1 9 5° 9 2 2 4	1 9 5° 2 8 4° 5	1 1° 1 6 4°	1 9 5 45° 1 5° 2° 4
21, 22	1 9 5° 9 2 2 4	1 1° 1 6 4°	1 1° 1 6 4°	1 1° 1 6 4°	1 1° 1 2 6 2° 5 1° 1 6 4°
27	1 1° 1 2				5

75.

MMA 86.11.406

Plate 98

H. 33 mm W. 45 mm Th. 14 mm

Fragment of a Table of Reciprocals
Later 1st millennium

76.

MMA 86.11.410

Plate 99

H. 60 mm W. 70 mm Th. 18 mm

Fragment of a Table of Reciprocals

Later 1st millennium

Figure 4. Conform Position-Preserving Transliteration of MMA 86.11.406 (+) MMA 86.11.410 and Liv. 29.11.77.34

48	1 2° 2 5° 6 3° 8 2° 4	4° 3 2° 4	1°
49, 50	1 2° 3 2° : 4° 3 1° 2 : 1 2° 4 2° 3 2° : 4° 2	4°	
51, 52	1 2° 5 2° : 4° 2 1° 1 1° 5 : 1 2° 6 2° 4 : 4° 1	4°	
	1 2° 6 4° 8 2°	4° 1 2° 8 1° 9 1° 2	
	1 2° 7 2° 8 4° 8	4° 1 9 8 8 5° 3 2°	
	1 2° 7 4° 7 2° 9 2° 2 5° 7 4° 6 4° :	4° 1 : 2° 2 2 3°	
57, 58	1 2° 7 5° 3 2° 6 1° 5	4° 5 7 3° 6	
	1 2° 8 5° 3 2° : 4° 3° : 1 3° : 4°		
60	1 3° 1 7 3°	3° 9 3° 2° 2 1° 3 2°	
61	1 3° 2 9 3° 6	3° 9 3° 4° 5	
62	1 3° 2 3° 5 3° 3 2°	3° 8 5° 2 4° 8	
	1 3° 3 4° 5	3° 8 2° 4	
	1 3° 4 4° 8 5° 3 2°	3° 7 5° 8 7 3°	
	1 3° 4 5° 5 1° 8 4° 5	3° 7 5° 5 3° 3 2°	
	1 3° 6	3° 7 3°	
	1 3° 6 2° 7 2 1° 3 2°	3° 7 1° 9 2° 9 1° 6 4° 8	
	1 3° 7 1° 2	3° 7 2 1° 3 2°	
	1 3° 7 3° 9 2° 2 3°	3° 6 5° 1 5° 2° 4	
70	1 3° 8 1° 8 1° 4 2° 4	3° 6 3° 7 1° 5 5° 6 1° 5	
	1 3° 8 2° 4 5° 4	3° 6 3° 4 4° 7 1° 4 3° 4 4 2° 6 4°	
72	1 3° 8 4° 5 5° 5 3° 3 2°	3° 6 2° 7	
	1 3° 8 5° 2 3° 7 1 5° 2 3°	3° 6 2° 4 3° 2	
	1 4°	3° 6	
	1 4° 1 8 8 5° 3 2°	3° 5 3° 5 4° 4 3° 1 5° 2 3°	
76, 77	1 4° 1 1° 5 : 3° 5 3° 3 2° : 1 4° 2 2° 4 : 3° 5 6 2° 2 3°		
	1 4° 2 5° 2 5° 2° 2 1° 3 2° 3° 4 5° 9 3° 1 1° 2		
	1 4° 3 4° 4° 8	3° 4 4° 3 2°	
80	1 4° 4 1°	3° 4 3° 3 3° 6	
	1 4° 5 2° 5 9 1° 5 3° 3 2°	3° 4 1° 8 4° 5	
82	1 4° 5 2° 8 7 3°	3° 4 8	
83, 84	1 4° 6 4° : 3° 3 4° 5 : 1 4° 8	3° 3 2°	
	1 4° 8 3° 2° 5	3° 3 1° 3° 9 2° 1 3° 6	
	1 4° 9 1° 3 3° 6	3° 2 5° 7 3° 2 3° 7 3°	
	1 4° 9 2° 1	3° 2 5° 5 1° 8 3° 1 6 4°	
88	1 4° 9 4° 4 2° 1 4° 3 4° 2 1° 3 2° 3° 2 4° 8 1° 8		
	1 5° 3° 5 3° 1 1° 2	3° 2 3° 3 7 3°	
90, 91	1 5° 1 6 4° : 3° 2 2° 4 : 1 5° 2 3° : 3° 2		
	1 5° 3 4° 6 4°	3° 1 3° 8 2° 6 1° 5	
	1 5° 3 5° 4 2 2 3°	3° 1 3° 6 1° 7 4° 6 4°	
	1 5° 5 1° 2	3° 1 1° 5	
	1 5° 5 4° 4 2° 6 4°	3° 1 6 1° 4 2° 4	
	1 5° 6 3 8 2° 4	3° 5° 1 5° 1 6 4°	
	1 5° 7 3 1° 9 1° 3° 7 2 1° 3 2° 3° 4° 5 1° 6 5° 2 3°		
	1 5° 7 1° 1 1° 5	3° 4° 3 1° 2	
	1 5° 7 5° 7 5° 3 1° 6 4° 8	3° 3° 1 3 1° 6 5° 2 3°	
100	1 5° 8 3° 1 6 4°	3° 2° 2 3°	

The fragment MMA 86.11.410 was correctly interpreted in *MCT*, p. 15, as part of a many-place table of reciprocals. In addition, it was suggested in *MCT* that MMA 86.11.410 may form a join with the fragment Liverpool 29.11.77,34 from the Free Public Museum in Liverpool. This hypothesis cannot be tested now, because the mentioned fragment was lost when the museum was hit by a bomb during World War II (personal communication to author from curator at Free Public Museum). Nevertheless, it is clear from the close fit between the conform transliteration of MMA 86.11.410 and a conjectured conform transliteration of Liverpool 20.11.77,34 that the hypothesis of a join may indeed be correct.

The fragment MMA 86.11.406 (actually only a thin flake) may be another preserved part of the same clay tablet, even if it does not physically form a join with MMA 86.11.410 (+) Liverpool 29.11.77,34. Note, in particular, that both MMA 86.11.410 and MMA 86.11.406 seem to have had ruled lines between most of the successive entries of the table.

If, as proposed, the three fragments MMA 86.11.406, MMA 86.11.410, and Liverpool 29.11.77,34 form an indirect join, then it is probable that they all once belonged to the reverse of a copy of the presumed First Tablet of the total twelve-place table of reciprocals. (Traces of sexagesimal numbers on the obverse of Liverpool 29.11.77,34 are mentioned in *MCT*, p. 15, but the reconstruction suggested there does not make sense and cannot be maintained. Note, for instance, that between the suggested ll. 4 and 5 of the restoration one would have to postulate nineteen “missing” lines of the table.)

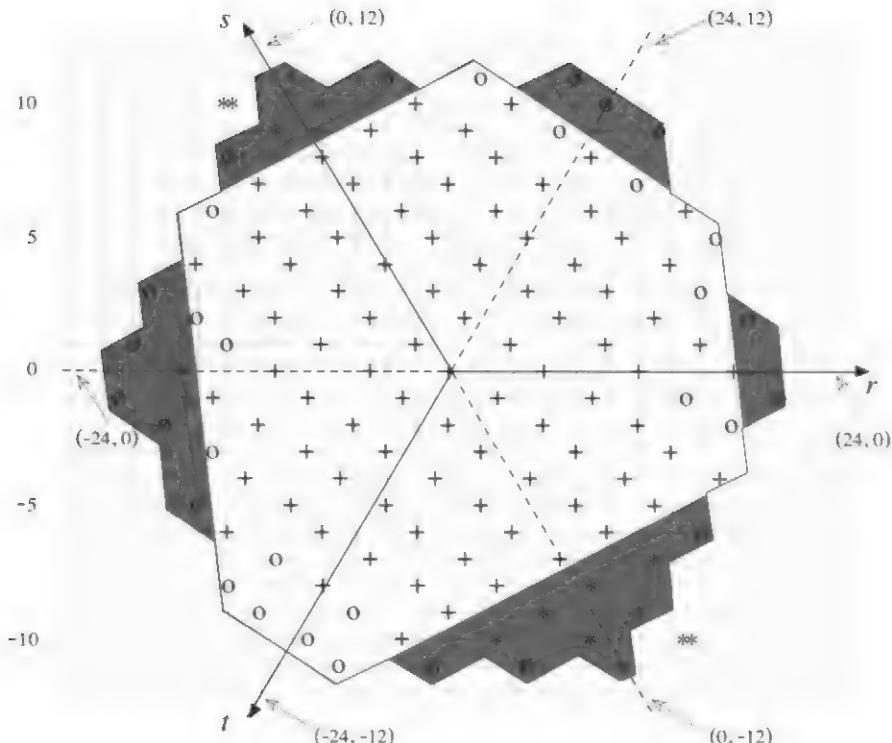
The proposed indirect join of the fragments MMA 86.11.406, MMA 86.11.410, and Liverpool 29.11.77,34 is presented in conform and position-preserving transliteration in Figure 4 above. The reconstruction shown there is based on the conjecture that the three fragments mentioned come from a clay tablet with forty-eight lines on the obverse and fifty-three on the reverse (including the lower edge). This conjecture is supported by the circumstance that plausible reconstructions of, for instance, the copies of the First Tablet of the original table of reciprocals containing the fragments A and F indicate that there were originally about fifty lines on the obverse of the tablet in both cases. Similarly, reconstructions of the copies of the related original list of squares containing the fragments A and C indicate that there were a little more than fifty lines on the obverse of the tablet in both cases. In the case of the copies of the related list of squares of squares, the obverses of the tablets containing fragments A and B can be estimated to have contained slightly less than fifty lines of numbers. In other words, several copies of the postulated First Tablet of the total twelve-place table of reciprocals from Babylon/Sippar or the related lists of squares or squares of squares seem to have had about fifty lines of numbers on their obverses.

The Double Six-Place Index Hexagon and the Total Twelve-Place Index Rosette

Figure 1 above shows that in the tri- or bi-axial index grid, all points representing one-place regular (relative) sexagesimal numbers are situated inside a certain “one-place index triangle.” Similarly, it can be shown (counting with logarithms) that all index points representing (at most) six-place numbers n between ‘1’ and ‘2’ lie within a certain “six-place index triangle” with vertices approximately at the index points representing the six-place numbers $2^{30} = 1\ 22\ 51\ 01\ 37\ 04$, $3^{19} = 1\ 29\ 40\ 50\ 24\ 27$, and $5^{13} = 1\ 34\ 11\ 24\ 12\ 05$. The index points representing regular numbers between ‘1’ and ‘2’ such that their reciprocals are (at most) six-place numbers lie within an inverted index triangle. Therefore, double six-place pairs are represented by points in the index plane situated simultaneously in both index triangles. This means that the points common to the two triangles lie in a certain six-sided figure, which may be called the “double six-place index hexagon,” colored white in Figure 5 below. A refined analysis shows that index points representing regular numbers n such that $n, \text{igi } n$ is a total twelve-place pair can lie either in a “double six-place index hexagon” or in a “five + seven-place index hexagon,” a “seven + five-place index hexagon,” etc. Taking all possible cases when

$p + q = 12$ into consideration, one finds that all total twelve-place pairs must lie within a certain “total twelve-place index rosette.” In Figure 5 below, this complicated figure is divided into the white “double six-place index hexagon” and the gray areas that contain index points representing total twelve-place pairs that are outside the double six-place hexagon.

Figure 5. The Representation of the First Tablet in the Total Twelve-Place Index Rosette



In Figure 5, the plus signs show the location of all index points representing regular double six-place numbers n between 1 and 2 belonging to the reconstructed First Tablet of the Babylon/Sippar table. The star signs show the location of all index points representing a total of twelve-place but not double six-place pairs belonging to the First Tablet. Together, the plus signs and the star signs fill out much of the total twelve-place index rosette. The zero signs stand for missing double-six-place numbers, and the crossed-over zero signs stand for missing total twelve-place but not double six-place numbers.

It is illuminating to consider in this way how the index points for the numbers n appearing in the First Tablet are distributed inside (and even outside) the total twelve-place index rosette. The following interesting patterns can be observed:

- In each horizontal line of index points, the set of plus signs and star signs (representing numbers included in the First Tablet) is never interrupted by zero signs (representing missing numbers).
- No (simple or crossed-over) zero signs are close to the s axis (representing positive powers of 3) or to the opposite, negative s axis (representing reciprocals, that is, negative powers of 3).
- Nearly all the zero signs appear in pairs, in the sense that if the index point r, s is marked by a zero, then the opposite index point $-r, -s$ is one step away (in the r direction) from a zero sign. The two points outside the index rosette, those marked by a double star sign, are also a pair in this sense.

d) Six of the zero signs, those at the upper and lower borders of the index rosette, cannot be reached from the positive or negative s axis by a line in the r direction staying all the time inside the index rosette.

e) Five pairs of zero signs are particularly conspicuous because they are not near the borders of the figure. Similarly conspicuous is, of course, the pair of index points outside the index rosette.

What these observations suggest is that the original table of reciprocals on the hypothetical original First Tablet was constructed in the following way. First, an adequate number of clay tablets were prepared, all wide and long enough to hold about thirty lines of text on the obverse, with two six-place sexagesimal numbers in each line. On these clay tablets were recorded equally many "preliminary tables," resulting from the application of the direct or inverted doubling and halving algorithm to successive powers of 3. On the first preliminary table would be recorded the initial pair $(n, \text{igi } n) = (2^0, 2^0) = (1, 1)$, followed by the pairs produced by the direct doubling and halving algorithm, that is $(2, 30), (4, 15), (8, 7 30)$, etc. In the index grid the regular numbers n obtained in this way would correspond to successive index points proceeding along the positive r axis, while the reciprocals $\text{igi } n$ would correspond to index points proceeding in the opposite direction, along the negative r axis.

The second preliminary table would consist of two subtables. In the first of these, the initial pair $(3^1, 3^{-1}) = (3, 20)$ would be followed by pairs produced by the direct doubling and halving algorithm, that is $(6, 10), (12, 5), (24, 2 30)$, etc. This time the constructed numbers n would correspond to successive index points along the half-line one step above the r axis and to right of the s axis, while $\text{igi } n$ would correspond to index points one step below the r axis and to left of the s axis. In the second subtable, the same initial pair $(3^1, 3^{-1}) = (3, 20)$ would be followed by the pairs $(1 30, 40), (45, 1 20), (22 30, 2 40), (11 15, 5 20)$, etc., produced by the inverted doubling and halving algorithm (halving n each time and doubling $\text{igi } n$). Therefore, in these pairs n would correspond to successive index points along the half-line one step above the r axis and to left of the s axis, while $\text{igi } n$ would correspond to index points one step below the r axis and to right of that s axis.

Similarly, the third preliminary table would consist of two subtables, both with the initial pair $(3^2, 3^{-2}) = (9, 6 40)$, etc. In the case of each subtable of a preliminary table, the computation of new pairs $(n, \text{igi } n)$ would continue as long as the sexagesimal numbers n and $\text{igi } n$ were short enough to be recorded on a single line of the clay tablet, that is as long as the total number of sexagesimal places in n and $\text{igi } n$ together did not exceed $6 + 6 = 12$. In the last preliminary table the initial pair would be $(3^{11}, 3^{-11}) = (49 12 27, 1 13 09 34 29 08 08 53 20)$, itself a total twelve-place pair.¹⁴

If this program had been carried out successfully, it would have led, ultimately, to the construction of nearly all total twelve-place pairs of regular sexagesimal reciprocal numbers, with practically no duplications.¹⁵ For this would have been needed $1 + 2 \cdot 11 = 23$ preliminary subtables, containing together slightly less than 390 pairs $(n, \text{igi } n)$.¹⁶

In the last step of the computation, all the pairs recorded in the twenty-three subtables of the twelve preliminary tables would be (if necessary inverted and) copied onto, say, three large tablets with nominally two six-place columns and less than 130 lines of numbers on each. With considerable difficulty the copying could be arranged so that the resulting combined table would contain all the nearly 390 total twelve-place pairs ordered with n ascending from 1 to 7 42 57 46 40 (index -8, -8) and $\text{igi } n$ descending from 1 to 7 46 33 36.¹⁷

The program outlined above seems to have been carried out fairly successfully in the case of the original First Tablet copied onto the many BM and MMA fragments from Babylon or Sippar and onto the large tablets S and U from Sippar and Uruk. There are very few trivial errors in this table, while there are numerous (actually sixty-three) both trivial and nontrivial errors in the table W from Uruk. The fact that the table contained a few more than total twelve-place pairs at the same time as some total twelve-place pairs were missing can be explained most easily by assuming that the computation by doubling and halving of successive pairs in the preliminary tables was halted,

inadvertently, too late in some cases and too early in some other cases. This is shown very clearly in Table 3 below, in which all total twelve-place pairs with n or $\text{igi } n$ between 1 and 2 have been recorded, ordered by index. In this table the five conspicuously missing pairs of reciprocal pairs and the single pair of more than twelve-place reciprocal pairs have been indicated by exclamation points in the right margin. The indicated line numbers are the line numbers in the reconstructed First Tablet.

Table 3. Total Twelve-Place Pairs with n or $\text{igi } n$ between 1 and 2, Ordered By Index (Beginning)

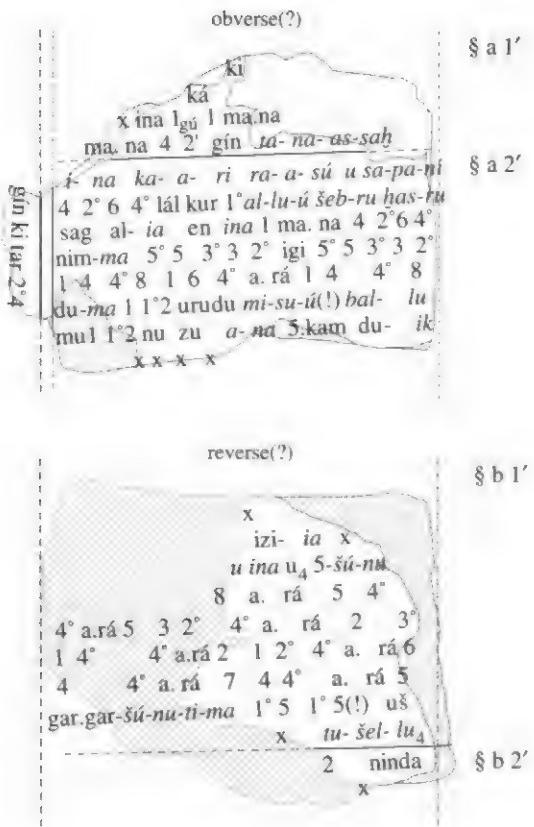
r	s	lines	$n = 2^r \cdot 3^s$	$\text{igi } n$	$p+q$
5	0	91	32	1 52 30	4
6	0	10	1 04	56 15	4
11	0	82	34 08	1 45 28 07 30	7
12	0	19	1 08 16	52 44 03 45	7
17	0	73*	36 24 32	1 38 52 37 01 52 30	10
18	0	28	1 12 49 04	49 26 18 30 56 15	10
-20	1	—*	37 04 43 53 12 11 15	1 37 05 25 20	12
-19	1	—*	1 14 09 27 46 24 22 30	48 32 42 40	12
-14	1	—	39 33 02 48 45	1 31 01 20	9
-13	1	—	1 19 06 05 37 30	45 30 40	9
-8	1	51	42 11 15	1 25 20	6
-7	1	50	1 24 22 30	42 40	6
-2	1	43	45	1 20	3
-1	1	58	1 30	40	3
4	1	35	48	1 15	3
5	1	66	1 36	37 30	4
10	1	24	51 12	1 10 18 45	6
11	1	77	1 42 24	35 09 22 30	7
16	1	15	54 36 48	1 05 55 04 41 15	9
17	1	86	1 49 13 36	32 57 32 20 37 30	10
22	1	—*	58 15 15 12	1 01 47 53 08 40 18 45	12
-15	2	—	59 19 34 13 07 30	1 00 40 53 20	11
-14	2	—	1 58 39 08 26 15	30 20 26 40	10
-10	2	92	31 38 26 15	1 53 46 40	8
-9	2	9	1 03 16 52 30	56 53 20	8
-4	2	83	33 45	1 46 40	5
-3	2	18	1 07 30	53 20	5
2	2	74	36	1 40	3
3	2	27	1 12	50	3
8	2	63	38 24	1 33 45	5
9	2	38	1 16 48	46 52 30	6
14	2	56	40 57 36	1 27 53 26 15	8
15	2	45	1 21 55 12	43 56 43 07 30	9
20	2	—*	43 41 26 24	1 22 23 50 51 33 45	11
21	2	—*	1 27 22 52 48	41 11 55 25 46 52 30	12

In this table, as before, dashes indicate missing double six-place reciprocal pairs, while dashes with a star indicate additional missing total twelve-place pairs. Note that the table contains only about one-third of all the regular reciprocal pairs contained in the twenty-three subtables of the twelve preliminary tables needed for the computation of the Babylon/Sippar table of reciprocals. To rearrange all those hundreds of pairs from so many subtables in order to get a combined table where n was made to ascend from 1 to about 7 45 must have been a formidable task indeed. Remember that when the medium was clay inscribed with cuneiform number-signs, there was no easy way of repairing a mistake, for instance by inserting a missing line or moving a misplaced line.

A Fragment of a Mathematical Problem Text

Text No. 77 (MMA 86.11.404), the sixth mathematical text belonging to the collection of cuneiform inscriptions on clay tablets in the Metropolitan Museum, is a small fragment of a Late Babylonian problem text with several exercises, two of which are partly preserved.

Figure 6. Position-Preserving Conform Transliteration of MMA 86.11.404



As indicated by the tentative partial reconstruction shown here in Figure 6, the preserved part of the text is from the left-hand side of a tablet originally with two or three columns. Thus, small parts of only the first and last columns of the text are preserved. Part of the left edge and part of the ruling marking the left margin of the left-hand column on the obverse(?) are also preserved. On what remains of the left edge, part of a line of text is visible, possibly from one of the last lines of the last exercise.

On one side of the fragment (the obverse?) traces of the last few lines of one exercise and seven almost complete lines from the beginning of another are preserved. Among other things the mention of units of weight (ma.na and gín) confirms that these two exercises were concerned with weight numbers for some objects of metal, as it turns out hoes in need of repair. On the other side of the fragment (the reverse?) are preserved only the right halves (or less) of eight lines from the last part of an exercise and insignificant parts of the first two lines of another exercise. The word uš, "length," near the end of the exercise, probably a part of the answer, seems to indicate that the exercise was concerned with some kind of work assignment.

The badly preserved text on the obverse(?) of MMA 86.11.404 can be transliterated and translated only with great hesitation.¹⁸

77.

MMA 86.11.404

Plate 100

H. 51 mm W. 61 mm Th. 27 mm

Publication: *MCT*, p. 140 (transliteration), pl. 20 (hand copy), and pl. 43 (photo)¹⁹

Obverse(?)

§ a 1'

-
 1'. [.....] ki(?) [.....]
 2'. [.....] ká(?) [.....]
 3'. x ina 1 <gú(?)> 1 ma.[na]
 4'. [. . m]a.na 4½ gín 'ta¹-na¹-as¹-[saḥ] |

§ a 2'

1. 'i¹-na ka-a-ri ra-a-sú u sa-pa-ni |
2. 4 26 40 lál kur
10 al-lu-ú šeb-ru ḥas-ru |
3. sag al-ia en
4. ina 1 ma.na 4 26 40 | nim-ma 55 33 20
5. igi 55 33 20 | 1 04 48
6. 1 06 40 a.rá 1 04 48 | [du-m]a
1 12 urudu mi-su-ú(!)(tablet: SI) bal-lu |
7. [mu 1 1]2(?) nu zu
a-na '9.kam(?)¹ du-ik |
8. [.] x x 5(?) x [.]
[.]

Reverse(?)

§ b 1'

- 1'. [.] x [.]
2'. [.] izi(?)-ia x [. |] x
- 3'. u ina u₄(?) 5-šú-nu [. . . |]
- 4'. 8(?) a.rá 5 40 |

- [40 a.rá 5 3 20]
 5'. 40 a.rá 2 30 | [1 40]
 6'. [40 a.r]á 2 1 20
 7'. 40 a.rá '6(?)¹ | [4(?)]
 [40 a].rá 7 4 40
 8'. a.rá.'5(?)¹ | [gar.gar-šú-nu-ti-m]a 15
 14(!) uš(?) |
 9'. [.....] x tu-šel-lu₄
-

§ b 2'

- 1'. [.....] 2 ninda |
 2'. [.....] x [.....]

Translation

Obverse(?)

§ a 1'

- 1'-2'. (too fragmentary for translation)
 3'. ... in (or from) 1 talent(?) 1 mina
 4'. [... mi]na 4½ shekel you(?) deduct(?)
-

§ a 2'

1. Through breaking and leveling of the quay,
2. ;04 26 40 as a reduction appears.
3. Should 10 hoes be broken or chipped, what were my original hoes?
4. From 1 mina ;04 26 40 deduct, it is ;55 33 20.
5. The opposite of ;55 33 20 is 1;04 48.
6. 1 06 40 steps of 1;04 48 go, it is
 1 12 00(?) refined and alloyed copper
7. [Since 1 12](?) you do not know,
 to its 9(?) go,
8. [.....] 8(?) [.....]
 [.....]

Reverse(?)

§ b 1'

- 1'. [.....] x [.....]
 2'. my x x [.....] x
 3'. and in a day(?) 5 of them
 4'. 8(!) steps of 5 is 40,

- 40 steps of 5 is 3 20,
 5'. 40 steps of 2 30 [is 1 40],
 6'. 40 steps of 2 is 1 20,
 7'. 40 steps of 6(?) is 4(?),
 40 steps of 7 is 4 40.
 8'. The 5(?) steps heap(?) it is 15.
 15(?) is the length(?)
 9'. [.....] x you let come up.
-

§ b 2'

- 1'. [.....] 2 ninda
 2'. [.....] x [.....]

Remarks

These badly preserved exercises originally may have been part of a “theme text” in the sense that certain parameters for a particular (applied) mathematical problem and certain relationships between those parameters were introduced in a first exercise, and then the same parameters appear again in the ensuing exercises, in various combinations but without further specification. If this was really the case, as is likely, it will obviously be difficult to find a convincing interpretation of what may be small parts of isolated exercises from the latter part of the theme text. Moreover, the best preserved exercise, the one appearing in § a 2' of MMA 86.11.404 is of a previously unattested type, expressed in terms of a wholly unfamiliar vocabulary, at least as far as mathematical texts go. In spite of these difficulties the steps of the computation in the preserved part of § a 2' are easy to follow.

The solution algorithm starts with the subtraction of the lál, “reduction, weight loss(?)” 4;26 40 (shekels) in 1 mina = 1 00 shekels. The result is 55;33 20 (shekels). Next, the reciprocal of ;55 33 20 is computed and is found to be 1;04 48. This value is then multiplied by 1 06 40, possibly to be understood as 1 06 40 = 10 00 · 6;40 (minas). The end result of the calculation seems to be that the initial total weight of a certain large number of hoes was equal to 1 06 40 · 1;04 48 = 1 12 (sixties of minas?) of refined and alloyed copper.²⁰

The next phrase is probably [mu 1 12] nu zu, “since 1 12 you do not know,” and may have the meaning that an explanation of the just obtained result of the calculation is needed.²¹ The last (imperfectly) preserved calculation *a-na* '9.kam¹ du-*ik*, “to its 9 you go,” may imply a multiplication of the calculated value 1 12 (sixties of minas) by 9.

What all this means is not completely obvious. Still, it is interesting to note that the subtraction of 4;26 40 shekels per mina may be related to what is going on in the preserved last couple of lines of § a 1'. There, apparently, something is subtracted from 1 mina, and the result is (possibly) expressed as

[ina 1 ma].na 4 2' gín 'ta'-na-'as'-[sah], “from 1 mina 4½ shekels you deduct.”

The proposed link between this line in § a 1' and the weight loss (lál) in § a 2' is that

4;26 40 shekels = 4½ shekels – 10 barley-corns ≈ 4½ shekels,

since 1 shekel = 3 00 barley-corns, so that 10 barley-corns is only ⅓ of a shekel.

In view of the above considerations the following extremely tentative reconstruction of the statement of the problem in § a 2' of MMA 86.11.404 is now suggested here:

Suppose that it is known (from a previous exercise on the clay tablet or from some “table of constants”) that the standard weight of the metal (that is, the bronze) of one hoe is 6⅔ mina (about 3½ kg). Suppose also that the proportional weight

loss through wear and tear is ;04 26 40. If what is left after the reduction is enough to fabricate 10 sixties of new hoes, how many hoes were there initially?

This would be a quite typical problem formulation in an Old Babylonian mathematical text, actually (in modern terms) equivalent to two linear equations for the initial weight (W) of the bronze and for the initial number (N) of hoes.²² The calculations in the text, described above, can be summarized in the following way:

Let $q = ;04 26 40$ denote the rate of weight loss (lál),
and let W and N be the unknown initial amounts of bronze and hoes.

Then the stated problem is equivalent to the following system of linear equations:

$W - q \cdot W = 10 00 \cdot w$ and $W = N \cdot w$, where
 $q = 4;26 40$ shekels per mina is the (rate of) reduction, and
 $w = 6;40$ minas is the weight of one new hoe, or, inversely,
 $h = ;09$ new hoes can be fabricated from 1 mina of bronze.

The answer to this problem is (partially) lost but ought to have been that²³

the initial weight of the bronze was $W = 1/(1 - q) \cdot 10 00 w = 1;04 48 \cdot 6;40$ minas = 1 12 00 minas;
the initial number of hoes was $N = h \cdot W = ;09 \cdot 1 12 00$ hoes = 10 48 hoes.

On the reverse(?) of the fragment, the incompletely preserved lines contain almost no recognizable words other than a.rá, “steps, times,” possibly also *ina u₄*, “in a day,” and 5-šú-nu, “5 of them.”

The meaning of this part of the text is thus far from clear. The end result of the computation seems to be ‘15’ (assuming that ‘14’ is an error). The lack of context makes it impossible to know whether it is correct or not that the sign uš following after [. . .]-ma 15 14 should be read as a word with the meaning “length,” and whether the GAR sign in the last line really means ninda (“length” or a unit of length measure). The syllabic spelling *tu-šel-lu₄*, “you let come up” (cf. *AHw*, p. 210 s.v. *elûm*) is unusual; one would expect instead a word-sign (sumerogram), possibly e₁₁, with the same meaning. Compare the suggested reading of the last few signs in § a 1’ as the syllabically spelled word ‘ta'-na-'as-[sah], “you deduct.”

Even the mathematics of this exercise is not very clear, due to extensive damage to the text. Although the following interpretation is only tentative and is based on some gratuitous assumptions, it does seem to make sense.

The term 5-šú-nu, “5 of them,” is an indication that this exercise is of the same general type as certain well-known Old Babylonian mathematical problems concerned with the division of property between several brothers or companions.²⁴ In the case of § b 1’ the phrase *ina u₄*(?), “in a day,” in l. 3’ and the word uš, “length,” in l. 8’ seem to suggest that what is shared here is some work assignment, such as the digging of a canal or the building of a wall.²⁵ The reconstruction of the text of § b 1’ proposed above is based on the assumption that the stated problem in this exercise was equivalent to the following:

Suppose that 5 hired workers get the assignment for one day to dig a canal or build a wall (of given cross-section) in unequal shares in the proportions 5, 2½, 2, 6, and 7, and that the total length to be processed in one day is 3 cubits.²⁶ Which lengths are then assigned individually for one day to the 5 workers?

The data appearing here is perfectly reasonable. It is well known that the Old Babylonian standard daily work norm for the digging of a canal was 10 volume shekels, which is the same as ¼ volume šar = ¼ · 1 00 ₙ. · 1 00 ₙ. · 1 c. (cubit). If this standard work norm is divided by the prescribed length 3 c. = 15 ₙ., the result is 10 ₙ. · 20 ₙ. = 2 c. · 4 c., corresponding to, say, a small canal with a rectangular cross-section of height 2 c. (1 meter) and width 4 c. (2 meters). Similarly, the Old Babylonian standard daily work norm for the building of a clay wall was 3;45 volume shekels = ¾ volume šar = ¾ · 1 00 ₙ. · 1 00 ₙ. · 1 c. If this work norm is divided by the prescribed length 15 ₙ., the result is that the area of a cross-section of the wall must have been 3 c. · 1 c., corresponding to, say, a low wall of height 3 c. (1½ meter) and width 1 c. (½ meter).

In Old Babylonian mathematical texts, problems of this type are often solved by use of the “rule of false value” (see J. Friberg, “Mathematik,” *RLA* 7 [1990], pp. 574–75, § 5.7 d). Applying that rule in the present case would result in a solution algorithm of the following kind:

Let initial “false values” of the individual shares be computed through multiplication of the proportions $5, 2\frac{1}{2}, 2, 6$, and 7 by the “false unit” $5 \underline{n} = ;05 \text{ n.} = 1 \text{ c.}$. The result is the false values $5 \text{ c.} = 25 \underline{n}, 2\frac{1}{2} \text{ c.} = 12;30 \underline{n}, 2 \text{ c.} = 10 \underline{n}, 6 \text{ c.} = 30 \underline{n}$, and $7 \text{ c.} = 35 \underline{n}$. The corresponding “false sum” is $L_f = 22 \frac{1}{2} \text{ c.} = 1;52;30 \underline{n}$, while the prescribed “true sum” of the individual shares is only $L = 15 \underline{n}$. (Note that $1;52;30$ is a regular sexagesimal number. Cf. the pair $(32, 1;52;30)$ in the standard table of reciprocals.) To amend the situation one must let the false unit $5 \underline{n} = 1 \text{ c.}$ be multiplied by the “correction factor”

$$c = L/L_f = 1/L_f \cdot L = 1/1;52;30 \cdot 15 = 1/1;52;30 \cdot ;15 = ;32 \cdot ;15 = ;08.$$

Consequently, the “true unit” is $;08 \text{ c.} = ;08 \cdot 5 \underline{n} = ;40 \underline{n}$. (as in line 4' of § b 1'). This means that the “true values” of the individual shares must be $5 \cdot ;40 \underline{n} = 3;20 \underline{n}, 2 \frac{1}{2} \cdot ;40 \underline{n} = 1;40 \underline{n}, 2 \cdot ;40 \underline{n} = 1;20 \underline{n}, 6 \cdot ;40 \underline{n} = 4 \underline{n}$, and $7 \cdot ;40 \underline{n} = 4;40 \underline{n}$. (as in the computations in ll. 4' to 7' of § b 1'). To check the result, one may observe (as in l. 8' of § b 1') that

$$3;20 \underline{n} + 1;40 \underline{n} + 1;20 \underline{n} + 4 \underline{n} + 4;40 \underline{n} = 15 \underline{n} = ;15 \underline{n} = 3 \text{ c.}, \text{ as requested.}$$

Cf. the appearance of the length [...] 2 ninda in the first line of the next exercise (§ b 2').

Conclusion

Although tiny, the MMA fragments examined here comprise an important addition to the corpus of known Late Babylonian mathematical texts. Consider, for instance, the beginning of the reconstructed First Tablet (Table 1, p. 297), where in column n , igi n the letter I stands for the lost tablet (“tablet I”) of which MMA 86.11.407, .408, and .409 are the only remaining fragments. Thanks to what is left of tablet I, the original First Tablet of a table of total twelve-place pairs of reciprocals can now be reconstructed in its entirety except for its first seven entries. (The reconstructions of the corresponding original First Tablets of tables of squares and squares of squares are still far from complete, but both reconstructions begin with the second entry.) It is interesting to note that tablet I seems to have been a more complete copy of the First Tablet than the two well-preserved tablets S and U. For this reason, neither S nor U can be identical to the original First Tablet.

The successful reconstruction of practically the whole First Tablet of a table of total twelve-place pairs of reciprocals is important for the history of mathematics for two reasons. First, the reconstruction made it possible to prove that the First Tablet must have been constructed through a stupendous tour de force on the part of some Late (or Old?) Babylonian mathematician. Indeed, the construction was possible only because a) the person who computed the reciprocal pairs listed in the table on the First Tablet must have understood the intrinsic properties of regular (relative) sexagesimal numbers so well that he realized that all such numbers can be obtained through application of the direct and inverted doubling and halving algorithms to successive powers of 3, and b) he was able to carry through to the end the laborious task of first working out the twenty-three preliminary tables of many-place numbers (see Table 3, p. 305) and then compiling a composite table in which all the pairs n , igi n occurring in any of the preliminary tables were ordered with n increasing from 1 to 2 (and ultimately to 7;45). This accomplishment exceeds all that is otherwise known from the whole corpus of Babylonian mathematical texts, with the exception, of course, of Late Babylonian mathematical astronomy. Secondly, the now established fact that the First Tablet was constructed through application of the doubling and halving algorithm is one more strong indication that Late Babylonian mathematicians were inspired by ideas inherited in some way (across a mathematically infertile period of about a thousand years) from their Old Babylonian predecessors. Indeed, the fragment CBS 29.13.21 very clearly documents that Old Babylonian mathematicians were already familiar with the use of the doubling and halving algorithm for the construction of many-place pairs of regular reciprocal numbers.

The two (reconstructed) exercises on the obverse and reverse of the fragment MMA 86.11.404 are interesting, too, since they demonstrate that problem types known from Old Babylonian mathematical texts reappear in Late Babylonian mathematics. Thus, although the formulation in terms of metal for hoes in § a 1' of MMA 86.11.404 is not known from any other Old (or Late) Babylonian mathematical texts, the kind of linear equation problem solved in that exercise has a close parallel in the Old Babylonian exercise YBC 4652 (MCT, R) § B3 (Neugebauer, *MKT* 3, pp. 414–16). Similarly, the proportional distribution problem in § b 1' of MMA 86.11.404 has close parallels in the Old Babylonian exercises YBC 10722 (MCT, P) and AO 8862, §§ 2.1–2, and its solution in terms of the rule of false value could equally well have appeared in an Old Babylonian mathematical text. Even the use of the ninda as the basic unit of length is clear evidence of the continuation of Old Babylonian traditions.

1. Note that, in this writer's text, double quotes indicate the introduction of new technical terms in the course of the discussion, while single quotes indicate transcriptions of cuneiform phrases or numbers.
2. A preliminary version of the present study was published as Preprint 30 (1991) (ISSN 0347-2809) in the Preprint Series of the Department of Mathematics, Chalmers University of Technology and the University of Gothenburg. J. Britton's survey, "Table of 4th Powers," is partly based on the methods and results put forward in that preprint.
3. Traditionally, computation with such numbers was taught in the Mesopotamian scribal schools since the beginning of the second millennium B.C.
4. When several "many-place" sexagesimal numbers are written one below the other, as in a table, the vertical alignment of corresponding sexagesimal places in the various numbers is easier to achieve if every sexagesimal place has two digits. (An exception to this rule is that the first sexagesimal place a_n is written as a decimal single digit if it is less than 10.) It is also advisable never to use commas to separate successive sexagesimal places from each other. Separating commas may be needed for other purposes.
5. In the nonpositional sexagesimal number notation employed by the Sumerians during the whole third millennium B.C., a variety of cuneiform signs for 1 or 10 times different powers of 60, with known precise values, were used to write sexagesimal integers. It may seem strange that the Old Babylonian mathematicians at the beginning of the second millennium B.C. abandoned this kind of unambiguous number notation in favor of the new relative place value notation for sexagesimal numbers. The transition is easily understood, however, when one comes to realize that sexagesimal numbers in relative place value notation constitute a smooth and powerful computational tool. This fact will become apparent in the discussion that follows in this text.
6. In absolute place value notation, the positive powers of 60 are written as 1, 1 00, 1 00 00, etc., and the negative powers as ;01, ;00 01, etc.
7. BM 77951 (*MKT* 1, p. 11, no. 8) is the only known Late Babylonian standard table of reciprocals.
8. Just as in this example, the easiest way to compute the reciprocal number $igi\ n$ is usually to imagine n factorized into a product of prime factors 2, 3, and 5, and to divide '1' by one such factor at a time.
9. The triaxial index grid is an ingenious device originally invented by Neugebauer, *Vorlesungen über die Geschichte der antiken mathematischen Wissenschaften* (Berlin, 1934), pp. 9–15, for the study of the pairs of reciprocal regular numbers occurring in the many-place table of reciprocals AO 6456. Its use is modified and somewhat simplified in the present discussion.
10. The colophon (endnote) of AO 6456 characterizes the table on the tablet, quite explicitly, as *pir-su reš-tu-u : 1: a-mu-ú : 2: a-mu-ú nu.al.til* 'first section, 1, the head of the family, 2, the head of the family, not finished.' (This author thanks K. Muroi for the interpretation of *amú* as "head of the family.")
11. The fragment BM 34601 = LBAT 1644 contains parts of the explicit computation of $\square(4\ 04\ 17\ 40\ 45\ 13\ 17\ 45\ 52\ 14\ 42\ 12\ 09) = \square\square(2\ 01\ 04\ 08\ 03\ 00\ 27)$. The result of the computation is a twenty-five-place regular sexagesimal number (J. Friberg, in preparation). It is interesting to note that, probably, 2 01 04 08 03 00 27 was the first regular number n on the second tablet of the original many-place table of reciprocals.
12. Only the beginning of the table is given here. The full table will be published elsewhere.
13. Besides W, the other two exceptional cases are the table of reciprocals D and the table of squares E.
14. The initial pair $(3^{12}, 3^{-12}) = (2\ 27\ 37\ 21, 24\ 23\ 11\ 29\ 42\ 42\ 57\ 46\ 40)$ is already a total thirteen-place pair.

15. If the direct or the inverted doubling and halving algorithm is applied with $(3^{11}, 3^{-11})$ as the initial pair, the result will be more than total twelve-place pairs alternating with total twelve-place pairs. Therefore, the computation will be aborted prematurely in both cases, and the three pairs of numbers n represented by the six zeros at the upper and lower borders of the index rosette in Figure 5 will never be found.
16. There are 130 total twelve-place pairs with either n or $\text{igi } n$ between 1 and 2. As is clearly shown by Table 3 (or by the index rosette in Figure 5), in the succession of pairs $(n, \text{igi } n)$ produced by the doubling and halving algorithm, usually 2 out of 6, sometimes 2 out of 5, have either n or $\text{igi } n$ between 1 and 2. Therefore, the 130 total twelve-place pairs with either n or $\text{igi } n$ between 1 and 2 are a little bit more than one-third of all total twelve-place pairs.
17. If n was not between 1 and 7 45, then n and $\text{igi } n$ would have to change places before the pair was recorded on one of the three large tablets. (The reason is that the square root of 60 is approximately 7;45.) Therefore, the last pair in the ordered total twelve-place table would be 7 42 57 46 40, 7 46 33 36.
18. Note that in the transliteration, the upright bar | denotes the end of a line in the cuneiform text. In the original discussion of the text (*MCT*, pp. 140–41) the first line of § a 2' is transliterated [i-n]a ka-a-ri ra-a-zu 10 sa-pa-ni(?), where *i-na ka-a-ri* is translated as “in the market(-place or -price?)”, while it is suggested that *rāzu* may be identified with *ra’izu*, “pitchfork.”
19. The author wishes to thank W. G. Lambert, E. Reiner, and K. Reiter for their valuable assistance in reading and understanding this unusually difficult text.
20. It is possible, though, that *bal-lu*, “mixed” refers to an alloy of metals (cf. OIP 2, 133:84 [Sennacherib] *siparri ša šeš-ša-šu-nu AN.NA bal-lu₄*, “bronze in which tin was mixed (in a ratio of) one-sixth,” cited in *CAD B*, p. 41 s.v. *balālu*). Also *mesū* is “refine (metal),” and *mēsu* is “refined metal” (*CAD* s.v.). Thus a small emendation of s1 to ú gives *mi-su-ú bal-lu*, “refined and alloyed.”
21. Cf. the Esagila Text (J. Friberg, “‘Seed and Reeds Continued’ Another Metro-Mathematical Topic Text from Late Babylonian Uruk,” *Bagh. Mitt.* 28 (1997), pp. 298–99 with the two parallel phrases *ki-i 18 nu zu-ú 3 barig še.numun*, “if you do not know 18: 3 barig of seed” (§ 4), and *mu 30 nu zu-ú 30 1(iku) aša₅ 3 (bán)*, “if you do not know 30; 30 is 1 iku of field, 3 bán of seed.”
22. Cf. the survey in J. Friberg, “Mathematik,” *RLA* 7 (1960), pp. 571–74, § 5.7 b.
23. The choice of $q = ;04\ 26\ 40$ as the given rate of weight loss must have been the result of careful consideration. The choice was made so that the remainder $1 - q = ;55\ 33\ 20$ would be a regular sexagesimal number, the reciprocal of $1;04\ 48$ (cf. line 11 in the First Tablet of many-place pairs of reciprocals). Incidentally(?), q is itself a regular number. (In modern notations, $q = 2/27$, and $1 - q = 25/27$.)
24. J. Friberg, “Mathematik,” *RLA* 7 (1990), pp. 569–70, § 5.6 j. See, for instance, VAT 8522 § 2 (J. Høyrup, “Changing Trends in the Historiography of Mesopotamian Mathematics: an Insider View,” in *History of Science* 34 [1996]), pp. 1–32, dealing with five brothers sharing silver. Close parallels to this Old Babylonian problem can be found in the Egyptian Rhind Mathematical Papyrus § 40, concerned with five men sharing loaves (see T. E. Peet, *The Rhind Mathematical Papyrus: British Museum 10057 and 10058* [London, 1923], and in the early Chinese *Nine Chapters on Mathematics* § 6, pr. 18, about five people sharing coins, see J. Friberg, “‘Seed and Reeds Continued’ Another Metro-Mathematical Topic Text from Late Babylonian Uruk,” *Bagh. Mitt.* 28 [1997], p. 292 n. 41). In AO 17264 (Neugebauer, *MKT* 1, pp. 126–34) three pairs of brothers share a trapezoidal field. The earliest known examples of this kind of sharing can be found in five proto-cuneiform “field division texts” from Jemdet Nasr (about 3000 B.C.), in which some extensive temple-owned pieces of land are distributed unequally among five high officials (see J. Friberg, “Round and Almost Round Numbers in Proto-Literate Metro-Mathematical Field Texts,” *AfO* 44 [1998] pp. 19–27).
25. For an example in a Sumerian administrative text see J. Friberg, “Bricks and Mud in Metro-Mathematical Cuneiform Texts,” in J. Høyrup and P. Damerow, eds., *Changing Views on Ancient Near Eastern Mathematics* (Berlin, 1997) fig. 9.1. In two Old Babylonian mathematical texts the work shared is the carrying of bricks (see J. Friberg, “Bricks and Mud,” pp. 141–42 § 9.4). Thus, in AO 8862 (Neugebauer, *MKT* 1), pp. 108–23 § 2.1, five hired men divide one man’s work in shares of the proportions 1, 2, 3, 4, 5. Note that the sum of 1, 2, 3, 4, and 5 is 15, a regular sexagesimal number. In AO 8862, § 2.2, and also in *MCT*, pp. 98–99, text P, hired men divide one man’s work in shares of the proportions 7, 11, 13, 14. Note that here too, although the proportions 7, 11, 13, and 14 are all nonregular, their sum 45 is regular.
26. In Old Babylonian mathematical texts the basic (often not explicitly mentioned) length unit was 1 *ninda* = 12 cubits. In Late Babylonian reformulations of Old Babylonian mathematical texts, the basic length unit was still the *ninda*, although the role of the *ninda* as the ordinary basic unit of length had by that time been taken over by the cubit. See in particular the Late Babylonian theme texts W 23 291–x, § 2 (J. Friberg, H. Hunger, and F. N. H. Al-Rawi, “‘Seed and Reeds,’ a Metro-Mathematical Topic

Text from Late Babylonian Uruk," *Bagh. Mitt.* 21 [1990]), and W 23 291, § 4 (J. Friberg, "'Seed and Reeds Continued' Another Metro-Mathematical Topic Text from Late Babylonian Uruk," *Bagh. Mitt.* 28 [1997]).

In the cases when the ninda is not mentioned explicitly, and when the multiples of the ninda are expressed in terms of sexagesimal numbers in relative place value notation, it is often convenient to imagine that the ninda as the basic unit is replaced by $\frac{1}{60}$ ninda, here called 1 ninda, abbreviated n.

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Nos. 78–88

Astronomical Texts

C. B. F. Walker

Introduction

Mesopotamian astronomy of the late second and early first millennia b.c.¹ is known to us from four principal sources: the astrological omen series *Enūma Anu Enlil*,² the compendium MUL.APIN,³ sundry star lists,⁴ and Late Assyrian astrological reports.⁵ The first and third categories are represented in the Metropolitan Museum's collection; for the first see text No. 71, and for the third see text No. 78, a fragment of a list of *Ziqpu* (culminating) stars.

Around the middle of the seventh century b.c., the practice of keeping a permanent record of regular astronomical observations began in Babylon. This record is preserved to us in a very fragmentary fashion in the texts now known as Astronomical Diaries; three parts of this material have been made available by A. J. Sachs and H. Hunger.⁶ The availability of records for consultation seems to have been one of the essential bases for the development of a detailed Babylonian mathematical theory of astronomy. The other bases are the Babylonian sexagesimal system of mathematics (which goes back to the third millennium b.c.), the invention of the zodiacal signs of 30° each (perhaps in the sixth century b.c.), and the agreement on a fixed calendrical cycle for the interpolation of "intercalary" months to keep the lunar and solar years in step (in about 500 b.c.). Tables for the interpretation of Babylonian dates in terms of the Julian calendar have been prepared by R. A. Parker and W. H. Dubberstein.⁷ It should be noted that for the purpose of computer calculations of past astronomical events, scientists use the convention that 1 b.c. = 0, 2 b.c. = -1, etc.

The Babylonian mathematical astronomical texts are mostly datable to the Seleucid Era and come from two sites, Babylon and Uruk. Pioneering work on this class of material was done by the late O. Neugebauer in his *Astronomical Cuneiform Texts: Babylonian Ephemerides of the Seleucid Period for the Motion of the Sun, the Moon, and the Planets*, 3 vols. (London, 1955). Two of the Metropolitan Museum's texts of this type (Nos. 79 and 80) were edited therein by Neugebauer, and the third (text No. 81) is a partial duplicate of a British Museum text edited therein; all three probably come from Babylon.

The nonmathematical texts of the Seleucid Era were discussed by A. J. Sachs in a study that has remained largely valid, despite the fact that the available sources have subsequently grown almost fiftyfold.⁸ Sachs identified four main types of text: Almanacs, Normal-Star Almanacs, Goal-Year Texts, and Diaries. Only the first two types are represented in the Metropolitan Museum's collection (text Nos. 83 and 82), by one example each; both are probably from Babylon.

The following abbreviations of the names of the zodiacal signs are commonly used in astronomical texts of the Seleucid period: *hun* for Aries; *múl-(múl)*, Taurus; *maš-(maš)*, Gemini; *alla* (= KÚŠU), Cancer; *a*, Leo; *absin*, Virgo; *rín*, Libra; *gír-(tab)*, Scorpio; *pa*, Sagittarius; *(su)hur-máš*, Capricorn; *gu*, Aquarius; *zib^{me}*, Pisces.

1. This edition of the astronomical material draws on earlier editions and transliterations by O. Neugebauer and A. J. Sachs and has benefited from the cooperation of Professor N. Roughton, Regis University, Denver, Colorado, and F. R. Stephenson, University of Durham, England.
2. E. F. Weidner, "Die astrologische Serie Enuma Anu Enlil," *AfO* 14 (1941/44) 172–95 and 308–18, *AfO* 17 (1954/56), pp. 71–89.
3. H. Hunger and D. Pingree, *MUL.APIN, An Astronomical Compendium in Cuneiform*, *AfO*, suppl. 24 (Horn, Austria, 1989).
4. *Ibid.*, pp. 141–44.
5. S. Parpola, *Letters from Assyrian Scholars to the Kings Esarhaddon and Assurbanipal*, pt. 1: Texts, pt. 2: Commentary and Appendices, *AOAT* 5/1 and 5/2 (Neukirchen-Vluyn, 1970 and 1983).
6. Sachs-Hunger, *Astronomical Diaries* 1–3.
7. R. A. Parker and W. H. Dubberstein, *Babylonian Chronology 626 B.C.–A.D. 75*, Brown University Studies 19 (Providence, 1956).
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78.

MMA 86.11.337

Plate 101

H. 61 mm W. 33 mm Th. 14 mm

Obverse/Reverse(?)

- 1'. [10 UŠ *a-na* MUL *n*] *a-a[ṣ-ra-pi]*
- 2'. [$\frac{1}{2}$ DANNA *a-n*] *a* MUL *gam-'**lum*¹
- 3'. [10 UŠ *a*-*na* *rit-ti* *gam-lum*
- 4'. [1 DANNA] *'a¹-na* *ma-a-šú*
- 5'. [$\frac{2}{3}$ DANNA] *'a¹-na* MUL AL-LUL
- 6'. [$\frac{2}{3}$ DANNA] *'a¹-na* 2 MUL *šá ina* SAG-DU
- 7'. [MU]L UR.GU.LA
- 8'. [10 UŠ *a-na*] 4 *šá* GABA-*šú*
- 9'. [$\frac{2}{3}$ DANNA *a-n*] *a* 2 *šá* *ra-pa-áš-ti*
- 10'. [10 UŠ *a-n*] *a e-du* *šá* KUN
- 11'. [10 UŠ *a-n*] *a* MUL A-E[DIN]
- 12'. [$\frac{2}{3}$ DANNA *a-n*] *a* *'na¹-a[d-dul-lum]*

Fragment of a List of *Ziqpu*-Stars

Later 1st millennium (Babylon)

Translation

Obverse/Reverse(?)

- 1'. [10 time-degrees to *n*] *a[ṣrapu]* (b, c Persei)
- 2'. [$\frac{1}{2}$ double-hour] to the Crook (α Aurigae = Capella)
- 3'. [10 time-degrees] to the handle of the Crook (β Aurigae)
- 4'. [1 double-hour] to the Twins (α Geminorum)
- 5'. [$\frac{2}{3}$ double-hour] to the Crab (Praesepe in Cancer)
- 6'-7'. [$\frac{2}{3}$ double-hour] to the two stars in the head of the Lion (ε, μ Leonis)
- 8'. [10 time-degrees to] the four stars in its (the Lion's) chest ($\alpha, \gamma, \eta, \zeta$ Leonis)
- 9'. [$\frac{2}{3}$ double-hour] to the two stars in its (the Lion's) flank (δ, θ Leonis)
- 10'. [10 time-degrees] to the single star in its (the Lion's) tail (β Leonis)
- 11'. [10 time-degrees] to Erua (γ Comae Berenices)
- 12'. [$\frac{5}{6}$ double-hour] to the Yoke (υ Boötis)

Remarks

The basic discussion of the then-known lists of *Ziqpu*-stars (stars culminating at the observer's zenith) is J. Schaumberger, "Die *Ziqpu*-Gestirne nach neuen Keilschrifttexten," ZA 50 (1952), pp. 214–29, with supplementary comments in idem, "Anaphora und Aufgangskalender in neuen *Ziqpu*-Texten," ZA 51 (1953), pp. 237–51. The star identifications given above are taken from the former article. The present text is a fragment of a duplicate to the group AO 6478 (from Uruk, Seleucid period; published in F. Thureau-Dangin, "Distances entre étoiles fixes d'après une tablette de l'époque des Séleucides," RA 10 (1913), pp. 215–25, and TCL 6 pls. XLI–XLII no. 21), VAT 16437

(from Babylon; published by J. Schaumberger, "Die *Ziqpu*-Gestirne nach neuen Keilschrifttexten," ZA 50 [1952], pp. 224–25), and K 9794 (from Nineveh, seventh century B.C.; published in CT 26, 50). The group varies in format. The reconstruction given above follows the format of VAT 16437. MMA 86.11.337 follows VAT 16437 in omitting the interval of 5 uš between α and β Geminorum.

The list of *Ziqpu*-stars is prefaced in AO 6478 by the remark, "Distances of the *Ziqpu*-stars that stand in the path of Enlil, in the middle of the sky, opposite the breast of the observer of the sky, and by means of which he observes the risings and settings of the stars at night." This remark is a quotation from *MUL.APIN* I col. iv 1–3, where it precedes an earlier list of *Ziqpu*-stars. The fuller form of the lists in AO 6478 and K 9794 gives the distances expressed variously by the amount of water in the water-clock, the time elapsed on earth, and the "distance" in the sky. The briefer form of the lists in VAT 16437, which is followed here, gives only the distances expressed by the time elapsed on earth. The time intervals are expressed in uš and DANNA (= *bēru*). 1 uš = 1 "time-degree" = 4 minutes; 1 DANNA = 30 uš = 1 "double-hour" = 120 minutes.

A more recent discussion of the lists of *Ziqpu*-stars is given in H. Hunger and D. Pingree, *MUL.APIN: An Astronomical Compendium in Cuneiform*, AfO, suppl. 24 (Horn, Austria, 1989), pp. 141–44. They comment on pp. 143–44 that the differences in uš recorded in AO 6478 are reasonably accurate. MMA 86.11.337 records the same differences.

79.

MMA 86.11.405

Plate 102

H. 39 mm W. 86 mm Th. 40 mm

Ephemeris of New and Full Moons for S.E. 263 (= 48/47 B.C.)
Seleucid Era (Babylon)

Publications: Neugebauer, *ACT* 1, 18 (pp. 100–01); *ACT* 3, pls. 32–33, 221, and 228

Obverse

Column i	Column ii	Column iii
8. [13,20 GÍR-TAB]	[2,38,40]	'6,23,5¹,[51 LAL U]
9. [13,20 PA]	[2,27,33,2]0	4,16,50,¹9¹ [LAL U]
10. [13,20 M]ÁŠ	'2,24,26¹,40	1,57,8,5[4 LAL U]
11. [13],20(!) GU	2,29,20	2,19,41,15 [U U]
12. '1'3,20 'zib ^{me} ¹	2,42,13,20	[4,25,56,5[7 U U]
13. 12,18,45 HUN	3,1,32,30 <>2>	[6,28,7,3[9 U U]

Reverse

Column i	Column ii	Column iii
1. '6¹,45 GÍR-TAB	3,[1]7,50	6,53,52,6 L[AL LAL]
2. '4,52,30¹ [P]A	[3,2]9,57	5,31,22,12 [LAL U]
3. [3 M]ÁŠ	3,35,4	[3],32,36,30 [LAL U]
4. [1,7,30 G]U	3,33,[11]	[.],43,41,36 [LAL U]
5. [29,15 G]U	3,24,18	2,4[8,54],54 [U U]

6. [28,20 <i>zib</i>]	[3],7,46,[40]	[4,51],30,36 [U U]
7. [28,20 HUN]	[2,4]7,46,40	[6,57,46,18 U U]
8. [28,20 MÚL]	[2,32],40	[5,19,58 U LAL]

Notes

Obverse

Column i ff.:MMA 86.11.405 contains obv. cols. i–iii 8–13 and rev. cols. i–iii 1–8 of the whole text as edited and restored by Neugebauer in *ACT* 1, pp. 100–01. A further fragment of the same tablet is VAT 209 (in Berlin).

Remarks

The Babylonian lunar ephemerides show that there existed two slightly different variants of Babylonian theory, which were named by Neugebauer “System A” and “System B.” For details of these two theories see *ACT* 1, pp. 41–85.

This fragment, together with the fragment in Berlin, is part of the latest-known lunar ephemeris of System A type. The Berlin fragment gives the date as S.E. 263. The Metropolitan fragment contains parts of obv. cols. i–iii and rev. cols. i–iii, representing parts of Columns B, C, and E in Neugebauer’s terminology; these give line by line for successive months (N) the following data:

Obverse

Column i = B_1 longitude of the new moon at syzygy in month N

Column ii = C length of daylight in time degrees

Column iii = E latitude of the moon

Reverse

Column i = B_2 longitude of the full moon at opposition in month N

Column ii = C length of daylight in time degrees

Column iii = E latitude of the moon

The terminology for latitude is LAL LAL, “positive latitude increasing”; LAL U, “positive latitude decreasing”; U U, “negative latitude decreasing”; and U LAL, “negative latitude increasing.”

80.

MMA 86.11.345

Ephemeris of Eclipses from at least S.E. 177 to 199(?)

Plates 103, 104

Seleucid Era (Babylon)

H. 72 mm W. 80 mm Th. 22 mm

Publications: Neugebauer, *ACT* 1, 61 (pp. 109–12); *ACT* 3, pls. 41 and 229

The first column of the tablet is damaged beyond hope of restoration. The following transliteration of the second column is based on Neugebauer’s edition in *ACT* 1, which ignores the broken signs at the top of the column. See copy, Plate 103.

Column ii

Obverse

	Φ_2	C	T	B	Ψ
1–2.	[2,7,57,24],26,40	3,[35]	[3]	[. . .]	[. . .]
3–4.	[2,4,1]4,4,26,[40]	[. . .]	'8 ¹ MÁS	8,10 BE	
5–6.	2,13,20	[. . .]	4	1,20 [AL]LA	12,[. . .]
7–8.	2,2,40,22,13,[20]	[. . .]		26,50 [GÍ]R	10,40 s[1]
9–10.	2,9,31,6,40	x [. . .]	[5]	2[3],30 MÚL	8 [. . .]
11–12.	2,8(!),2,57,46,[40]	[. . .]		15,50 [GÍR]	14,30 [. . .]

Reverse

1–2.	[2,4,8,31,6,40]	[. . .]		[12,40 MÚL]	[. . .]
3–4.	2,13,2[5,33,20]	[. . .]	6	[4],40 GÍ[R]	[. . .]
5–6.	1,5[8,45,5]5,33,[20]	'3 ¹ ,[15]		1,30 MÚL	'5 ¹ ,20 BE
7–8.	2,23,20	2,53	7	23,40 RÍN	
9–10.	2,4,58,31,6,40	2,49		23 zib	11 ULÙ
11–12.	2,7,12,57,46,40	'3,18 ¹	'8 ¹	12,30 ABSIN	9,30 sI
13–14.	'2 ¹ ,10,21,6(!),40	2,42		[12],30 zib	13,20
15–16.	[2,1,5]0,22,13(!),20	3,22	[9]	[2,10 ABS]IN(!)	[14,50]
17–18.	[. . .] 20 [. . .]	[2],36		[. . .]	[. . .]

Remarks

The ephemeris follows Neugebauer's "System A" (see text No. 79 = MMA 86.11.405). The present text does not follow the normal pattern. In the second column the data for each lunar syzygy is written on two consecutive lines, containing the following elements: relative velocity of the moon with respect to the sun (Neugebauer's column Φ_2), length of daylight in time degrees (Neugebauer's column C), date of the syzygy in regnal years of Antiochus VIII (Neugebauer's column T), longitude of the new moon at syzygy (Neugebauer's column B), eclipse magnitudes (Neugebauer's column Ψ : the ideogram BE indicates negative values of Ψ , i.e., eclipse excluded; the ideogram sI means "north," and the ideogram ULÙ means "south," although neither term appears elsewhere in connection with eclipses). For a fuller explanation and discussion of the various errors in the text that make its interpretation and dating problematic see Neugebauer's edition. The clear rule on the reverse between lines 8 and 9 is without apparent significance.

81.

MMA 86.11.363

Plates 105, 106

H. 137 mm W. 125 mm Th. 39 mm

Procedure Text for the Moon
Seleucid Era (Babylon)

Obverse

(beginning of obverse broken)

- 1'. [.] x x [.]
 2'. [. ^dš]amaš a-rá x [.]
 3'. ^tal¹-lik u x [.] ^tzi¹ [^d] sin¹ [šu₁₀]-a-ti a-rá 4(?) BI(?) [DU(?).]
 4'. šá nim-ka ^tki(?)¹ [.] ^tšá¹ taš-kun ki-i tab šú-ú ki 10(!) tab u ^tki-^t1 [lal šu-ú 10]
 5'. ta lib-bi-šú lal šá t[ag₄(?) a-rá] BAR-NUN arkitu(EGIR)^u šá taš-kun DU^{ak} BE a-rá x x [.]
 6'. ki-i nim u sig x [. šá a-rá] BAR-NUN arkitu(EGIR)^u tal-lik ki-i nim nim u lu- ú ^tsig(?) sig(?)¹ šu-ú
 7'. [t]a BE šá a-rá BAR-[NUN du la]l ki-i 20 u lu-ú 10 lal šu-ú ki BE šá a-rá
 8'. BAR-NUN tal-lik tab ana šú tašakkan(^tgar¹)^{an} ^tki¹-i DIŠ-UD šá nim al-la BE u BAR-NUN
 atrat(diri)^{at}
 9'. BE u BAR-NUN ta lib-^tbi-šú¹ lal ana NA qibi(^te¹)^{bi} šú ana NA gur u₄-mu la(nu) tušanni(man)ⁿⁱ 6 ki si-man
 10'. maḥrû(igi)^u tab kima(gim) maḥrû(igi)^u epuš(dù)^u ana šú qibi(^te¹)^{bi} ištēn(1)^{en} me lal ^tšú(?)¹ ana arkišú(ár)^{šú}
 innahis(lal)^{is}
-
- 11'. NA ^tana¹ epēšika(dù)-ka ^tki-i si¹-man šá ge₆ DU a[l]-la lal šá ge₆ i-^t[i g]e₆ DU TA LAL šá ge₆ [nim]
 12'. <šá tag₄> <.> ME ina ME-š]ú ^tki¹-i si-man ^tšá¹ ge₆ DU al-^tla¹ LAL šá ge₆ atrat(diri)
 13'. ^tLAL šá¹ [ge₆ ta ge₆ DU nim šá] ^ttag₄¹ ta ^t6(?)¹ lal(?) ištēn(1)^{en} ME tab šá tag₄ a-rá 10 DU
 14'. šá D[UL-DU-ma šu-ú] zi ^d[šamaš] šu₁₀-a-ti a-rá zi ^dsin
 15'. šá arh[^ti(it[u])-šú DU-ma šá DUL-DU-m]a(?) ana z[i(?) ^dsin tašakkan(gar)^{an}] ^tzi(?) ^dšamaš¹ [ta z]i(?) [^dsin]
 16'. [lal-ma šá DUL-DU-m]a šu-^tú¹ [BE tašakkan(gar)^{an}]
 17'. [.] zi ^dšamaš [.]
 18'. [.] x-ka ki ki ^dšamaš [.]
 19'. šá [.] 10 lu-maš ta lib-[bi-šú nim]
 20'. šá [. ki BAR-NUN] šá lu-maš šá-šú ^tki¹ [tab tab ki lal lal]
 21'. šá-niš z[i(?)] ^tdšamaš¹ šu₁₀-a-tim šá zi ^td¹[sin(?)]
 22'. x [x] te-e-še-pi šu-ú ki [.]
 23'. [.] nim u sig šá-šú ki [.]
 24'. [. zi] ^td¹sin šá itu D[U(?).]
 25'. [.] x x [.]
 (rest of obverse broken)

Reverse

(beginning of reverse broken)

- 1'. [. BE u BAR]-^tNUN ta^t lib-bi-^tšú¹ [lal]

- 2'. '6 ki¹ si-man mahṛū(igi)^ū tab kīma(gim) mahṛū(igi)^ū ep[uš(d[ù]uš)]

3'.	BAR-NUN	šá lu-maš šá šú	B[AR-NUN	šá nim u sig šá šú]
4'.	1;24	ḥun	0;36	'ríñ ¹
5'.	1;16	múl	0;44	'gír-tab ¹
6'.	1;8	maš	0;52	'pa ¹
7'.	1	alla	1	máš
8'.	0;52	a	1;8	gu
9'.	0;44	absin	1;16	zib ^{me}

- 10'. ME *ana epēšika*(dù)^{ka} ge₆ DU a-rá 10 DU^{ku} ME *ina* 1 ME [.]

11'. BAR-NUN *gab-bi* šá nim u sig zi ^d*sin* a-r[á 4 DU ki] 'nim' [u sig šá sin]

12'. *ki-i* tab lal *ki-i* lal tab BE a-rá BAR-NUN D[U-m]a ² h[ab-r]at ki BE u BAR-[NUN tab(?)]

13'. *ki-i* DIŠ-UD šá nim u sig šá a-rá BAR-NUN *arkītu*(ár)^{lá} *tal-lik* *ki-i* nim nim u lu-ú nim sig š[u-ú]

14'. ki BE BAR-NUN u 2 h[ab-r]at tab u *ki-i* ¹20¹ u lu-ú 10 lal šú-ú ta BE BAR-NUN u 2 h[ab-r]at lal

15'. *ana* ME *qibi(e)*^{bi} *ki-i* DIŠ-UD šá sig al-l[a B]E BAR-NUN u 2 h[ab-r]at *atrat*(dirig)^at BE BAR-NUN u 2 h[ab-r]at

16'. ta *lib-bi*-šú lal *ana* ¹ge₆ *qibi(e)*^{bi} [ME *ana* ge₆ gu]r 'ME là tušanni(man)^{ní} 6 ki *si-man* *mahrû*(igi)^ú tab

17'. *kīma*(gim) *mahrû*(igi)^ú ¹*epuš*(dù)^u^s [ištēn(1)^{en} u₄-me lal *ana* ME] *qibi(e)*^{bi}

18'. ge₆ *ana epēšika*(dù)-*ka* g[e₆ DU ta 6 lal ištēn(1)^{en} u₄-mu tab] 'ana' igi-šú DU *kīma*(gim) NA *epuš*(dù)^u^š

19'. BAR-NUN *gab-bi* [šá nim u sig zi ^d*sin* a-r]á 4 DU-ku ki nim u sig šá ^d*sin*

20'. *ki-i* tab tab *ki-i* lal lal BE šá a-rá BAR-NUN D]U(?)^{ku} 2 h[ab-r]at ta BE u BAR-NUN lal

21'. [k*i*]-i DIŠ-UD šá nim [u sig šá a-rá BAR-NUN t]al-lik *ki-i* nim nim u lu-ú

22'. [nim si]g šu-ú [ki BE BAR-NUN u 2 h[ab-r]at tab u *ki-i*] 20 u lu-ú 10 lal šú-ú

23'. [.] x x x [. ana ge₆] *tašakkan*([ga]r)^{an} *ki-i* DIŠ-¹UD¹ šá nim

24'. [. ana ME] *qibi*(e)^{bi} ME(?) lal(?) ge₆ *ana* ME gur

25'. [ME là tušanni(man)^{ní} 6 ki *si-man* igi tab *kīma*(gim) igi *epuš*(dù)^u^š ištēn(1)^{en} ME tab

26'. [. ana ge₆] *qibi(e)*^{bi}

27'. [BAR-NUN šá lu-maš šá nim BAR-NUN šá nim u sig šá] 'nim'
(six lines of the table [and colophon?] broken)

Translation

Obverse

[In order for you to find the (time interval) ŠÚ...]
(several lines missing)

- 1'. [.]
2'. [.] the sun by [.]
3'. you multiply, and that velocity of the moon you [multiply] by 4(?) (of(?)) the elongation(?),
[.]

- 4'. which you subtracted(?) with(?) [.], which you put down in the case of positive values you add to 0;10 and in the case of negative values 0;10
- 5'. you subtract from it. The remainder(?) you multiply by the second correction that you (previously) put down. The longation by [.]
- 6'. In the case of positive or negative (latitude) [. that] you multiplied by the second correction in the case of positive latitude you subtract(?), in the case of That (result)
- 7'. you subtract from the elongation that you multiplied by the (second?) correction. (Alternatively) if the result was -0;20 or -0;10, add it to the elongation that you multiplied by
- 8'. the (second?) correction; put {the result} down as the ŠÚ (But) if the DIŠ-UD for positive latitude is greater than the corrected elongation,
- 9'. subtract the corrected elongation from it; predict the result as the NA. The ŠÚ retrogrades to the NA. You do not change the day. Add 6 (large hours) to the previous time.
- 10'. Operate as before. Predict the result as the ŠÚ. Subtract one day. The ŠÚ retrogrades.
-
- 11'. In order for you to find the (time-interval) NA: if the time elapsed since sunset is less than the LAL of the night, you subtract the time elapsed since sunset from the LAL of the night.
- 12'. <What remains> [<.> The day (of opposition falls) in] its day. If the time elapsed since sunset is greater than the LAL of the night,
- 13'. you subtract the LAL of the night from <the time> elapsed since sunset; that which remains from 6 (large hours) you subtract. Add one day. Multiply what remains by 0;10.
- 14'. What results, it is the distance traveled [zi] by the sun; [multiply] that (figure) by the velocity of the moon
- 15'. of its month. Put down that result, as the distance traveled by [the moon]. Subtract the distance traveled by the sun [from] the distance traveled by [the moon].
- 16'. [Put down that result, as the elongation]
- 17'. [.] the distance traveled by the sun [.]
- 18'. [. your [.] to the longitude of the sun [.]
- 19'. of [.] the 10th (degree) of a zodiacal sign [subtract] from it [.]
- 20'. of [. With the correction] of the relevant zodiacal sign [you shall add in the case of increasing values, in the case of decreasing values you shall subtract].
- 21'. Alternatively that distance traveled by the sun which (by) the velocity of [the moon(?)]
- 22'. you multiplied, that (figure) with [.]
- 23'. [. of(?)] positive or negative latitude (of the moon), that (figure) with [.]
- 24'. [. by the velocity] of the moon of its month [multiply(?)]
- 25'. [.]
(rest of obverse broken)

Reverse

(beginning of reverse broken)

- 1'. [. subtract the elongation and correction from (it) [.]
- 2'. Add 6 (large hours) to the previous time. Operate as before [.]
-

3'. Correction(s) (for longitude) for the zodiac sign for evening	[Correction(s) for positive and negative latitude for evening]
4'. 1;24 Aries 0;36 Libra	[18 Aries 42 Libra]
5'. 1;16 Taurus 0;44 Scorpio	2[2 Taurus 36 Scorpio]
6'. 1;8 Gemini 0;52 Sagittarius	2[6 Gemini 34 Sagittarius]
7'. 1 Cancer 1 Capricorn	3[0 Cancer 30 Capricorn]
8'. 0;52 Leo 1;8 Aquarius	[34 Leo 26 Aquarius]
9'. 0;44 Virgo 1;16 Pisces	[38 Virgo 22 Pisces]

- 10'. In order for you to find the (time interval) ME, multiply the time elapsed since sunset by 0;10,
... [.]
- 11'. The total correction for positive or negative latitude [multiply by 4] the distance traveled by the moon [to/
from] the positive [or negative] latitude of the moon.
- 12'. In the case of increasing values you subtract; in the case of decreasing values you add. You multiply the
elongation by the correction, and you add(?) the 2 of the disk to the corrected longitude.
- 13'. In the case of (?) the DIŠ-UD for positive or negative latitude, which you multiplied by the latter correction,
in the case of positive latitude you subtract(?); in the case of
- 14'. You add this (result) to the corrected elongation plus the 2 of the disk, or if the result was -0;20 or -0;10,
subtract it from the corrected elongation plus the 2 of the disk.
- 15'. Predict {the result} as the ME. (But) if the DIŠ-UD for <positive or> negative latitude is greater than the
corrected elongation plus the 2 of the disk, you subtract from it the corrected elongation plus the 2 of the disk.
- 16'. Predict the result as the GE₆ [the ME retrogrades to the GE₆]; you do not alter the day. Add 6 (large hours) to
the previous time.
- 17'. Operate as before, (but) subtract one day. Predict the result as the ME.
-
- 18'. In order for you to find the (time interval) GE₆, you subtract [the time elapsed since sunset from 6 (large
hours); you add one day]; it moves forward; proceed as (in the procedure for finding) the NA.
- 19'. Multiply by 4 the total correction [for positive or negative latitude, the distance traveled by the moon] and add
to it the positive or negative latitude of the moon
- 20'. in the case of increasing values; in the case of [decreasing values subtract; the elongation, which] you
multiplied [by the correction], you subtract the 2 of the disk from the corrected longitude.
- 21'. In the case of (?) the DIŠ-UD for positive or negative latitude, which you multiplied by the correction, in the
case of positive latitude you subtract(?), or
- 22'. [in the case of]; this (result) [you add to the corrected elongation plus the 2 of the disk; or if]
the result was -0;20 or -0;10
- 23'. [. ; put (the result) down [as the GE₆]. If the DIŠ-UD for positive latitude
- 24'. [is greater than the corrected latitude plus the 2 of the disk, subtract the corrected latitude from it; what
remains] predict [as the ME]. The GE₆ retrogrades to the ME.
- 25'. [You do not change the day. Add 6 (large hours) to the previous time.] Operate [as before] but add one day.
- 26'. [.] Predict the result [as the GE₆].

- 27'. [Correction(s) (for longitude)
for the zodiac sign for evening]
(rest of table and colophon(?) broken)
- [Correction(s) for positive and negative
latitude for evening]

Notes

Obverse

- 1' ff.: The transliteration of this text, in contrast with the other astronomical texts presented here, follows the conventions used in Neugebauer's edition of the parallel text (*ACT* 201) in order to allow easier comparison of the two texts.
- 1'-10': Although ll. 8b'-10' correspond broadly, the latter part of Neugebauer, *ACT* 201's procedure for the ŠÚ, Step e, Section 1 (e), (f), and (g), the previous lines still do not fit easily with Neugebauer, *ACT* 201.
- 9': šú *ana* NA *gur*: this phrase does not appear in Neugebauer, *ACT* 201. While a translation is offered, the real meaning is not apparent to this writer. See also rev. 16' and 24' below.
- 10': By comparison with Neugebauer, *ACT* 201, the Metropolitan Museum text transposes the clauses *ana* šú *qibi*(^l*e*)^{bi} and *ištēn*(^l*e*)^{en} *me lal*, and adds an unexpected clause 'šú(?)¹ *ana arkīšú*(ár)^{šú} *inahhis(lal)*^{is}.
- 11'-20': These lines correspond broadly with Steps a-c for the NA in Neugebauer, *ACT* 201. Thereafter ll. 21'-25' appear to offer a fragment of an alternative procedure (ll. 21' šá-niš). After the break at the end of the obverse, rev. 1'-2' are again comparable with the end of *ACT* 201's procedure for the NA (Step e, Section 2 (e) and (f)).
- 12': <šá tag₄> [< >]: comparison with Neugebauer, *ACT* 201's procedure suggests that nothing is required here.
- 13': *ištēn*(^l*e*)^{en} ME tab: the text here and on BM 33451+ allows the correct reading of Neugebauer, *ACT* 201 obv. 15.
- 22': *te-e-še-pi : eṣēpu*, "to double, multiply," can also be represented by the Sumerian sign tab, although tab does not appear to be used with this meaning elsewhere in the Neugebauer, *ACT* texts.

Reverse

- 3'-9': The appearance of the tables for corrections for evening phenomena written here between the procedures for NA and ME gives the clue to the identification of Neugebauer, *ACT* 201 obv. 28-30 as another set of tables for corrections for evening phenomena (duplicating that given on the MMA tablet) rather than as the first lines of the procedure to find the ME; that procedure would have begun on the first line of the reverse of Neugebauer, *ACT* 201.
- 10'-17': Together with BM 33451+ the present text allows the restoration of most of the damaged text of Neugebauer, *ACT* 201's procedure for the ME.
- 16': [ME *ana ge*₆ *gur*]: this is restored from BM 33451+ rev. 14.
- 18': The inclusion of *kīma(gim)* NA *epuš(dù)*^{uš}, "proceed as for the NA," allows the scribe to omit several lines of Neugebauer, *ACT* 201's procedure.
- 22': This line is restored after the pattern of ll. rev. 13'-14', but there is not in fact room for all the restored text.
- 24': ME(?) *lal*(?) is unintelligible to this writer.

Remarks

This text parallels and partly duplicates the lunar procedure text Neugebauer, *ACT* 201, with some variants and variant procedures. That text is described by Neugebauer, *ACT* 1, p. 226, as follows: "The present text is undoubtedly one of the most interesting tablets in all the material presented here. It gives the rules for the computation of the time intervals between sunrise and moon set (or vice versa) just before or after opposition. The influence of the variable inclination of the ecliptic with respect to the horizon and the influence of the moon's latitude are taken into consideration in order to predict accurately the phenomena in question even in very narrow limiting cases."

Neugebauer's analysis of *ACT* 201 occupies fourteen pages, which it would be pointless to reproduce here. The translation of such a text is fraught with difficulty, not least because many of the technical terms have several different meanings, depending on the precise contexts in which they are used. Thus a correct translation depends on a correct interpretation. Where MMA 86.11.363 follows Neugebauer, *ACT* 201, the translation is not in doubt. Where it deviates from Neugebauer, *ACT*, this writer's translation must be regarded as provisional. Use has also been made of a further unpublished parallel text, BM 33451 + 47744 + 47942, both in the interpretation of MMA 86.11.363 and in the restoration of broken passages. A full interpretation of the variant traditions of MMA 86.11.363 must await a complete reanalysis of all three texts.

82.

MMA 86.11.369

Plates 107, 108

H. 83 mm W. 79 mm Th. 28 mm

Normal Star Almanac for S.E. 70 = 242–241 B.C.

Seleucid Era (Babylon)

Obverse

- | | |
|--|--|
| 1. [BAR] | GE ₆ 6 USAN <i>dele-bat</i> SIG SUR SI '2 ¹ /2 KÙS '8 ¹ [USAN <i>dele-bat</i> e SUR ULÙ] |
| 2. [15 . . . ME] | 13 USAN <i>dele-bat</i> e MÚL IGI šá še-pít MAŠ-MAŠ [.] |
| 3. [15 . . .] x SÚ | 15 MÚL-BABBAR <i>ina</i> GIŠ-GIGIR SÚ 18 US[AN] 'dele-bat e MAŠ-MAŠ šá SIPA(?) 4 ¹
[KÙS] |
| 4. [1]'6 ¹ 6,50 GE ₆ | 23 GU ₄ -UD <i>ina</i> ŠÚ ¹ <i>ina</i> GIŠ-GIGIR ŠÚ |
| 5. 16 8,10 na | 26 USAN 'dele-bat' SIG ¹ MAŠ-MAŠ IGI 4 KÙŠ (erasure) |
| 6. 27 21,40 KUR | 27 KAK-BAN [ŠÚ] |
| 7. 10,20 | 29 AN <i>ina</i> RÍN UŠ |
| 8. GU ₄ 1 23,40 TAB 9,50 | '2(?) USAN <i>dele-bat</i> ¹ SIG MAŠ-MAŠ ár 1+[x] KÙŠ |
| 9. 14 15,10 ME | GE ₆ 13 USAN <i>dele-bat</i> e MÚL ár šá [A]LLA šá ULÙ 2/3 KÙ[Š] |
| 10. 14 3,50 ŠÚ | 14 30+[. . . ME N]IM(?) -A AN-KU ₁₀ 'sin ¹ BAR DIB |
| 11. 15 1 GE ₆ | 13+[. . . MÚL-BABBAR <i>ina</i> S]AG MAŠ-MAŠ IGI |
| 12. 15 '7 ¹ ,40 n[a] | [. . . USAN <i>dele</i> -bat SIG SAG A 3[1/2] KÙŠ 2 ¹ 5 ¹ GU ₄ -UD <i>ina</i> NIM <i>ina</i> MAŠ-MAŠ IGI |
| 13. 27 10 K[UR(?)] | [. 2(?)] '8(?) 5(?) 1(?) ME(?) ¹ [ana(?) Š]Ú(?) '20(?) ¹ [AN]-KU ₁₀ ¹ 20
ana PAP |

-
- | | | |
|-----|----------------------------|---|
| 14. | SIG 30 15,10+[...] | [...] USAN <i>dele</i> - <i>bat e</i> LUGAL 2/3 KÙŠ |
| 15. | 14 8,50 Š[Ú] | [...] (erasure) |
| 16. | 15 5,30 M[E] | [...] USAN] <i>dele</i> - <i>bat</i> 1 ^e MÚL TUR 1/2 KÙŠ 12(?) GU ₄ -UD <i>ina</i> NIM <i>ina</i> ALLA ŠÚ |
| 17. | 15 4,10 <i>na</i> | [...] 11 20 GUB |
| 18. | 16 5,10 G[E ₆] | [...] USAN <i>dele</i> - <i>bat</i> SIG] 1 ^r GIŠ ¹ -KUN A 4 KÙŠ |
| 19. | 27 19 KUR | [...] 1 ^r USAN ¹ [dele]- <i>bat e</i> GÈR ár [šá A] |
| 20. | | [...] USAN AN SIG MÚL MÚR[UB šá SAG GÍ]R(?) ¹ TAB(?) ¹ 8 ¹ u |
| 21. | [Š]U 1(?) x [...] | [...] x [...] |
- (rest of obverse broken)
-

Reverse

(beginning of reverse broken)

-
- | | | |
|------|--|--|
| 1'. | [AB],50 TAB | [.] |
| 2'. | [13 . . .],X ME | [.] |
| 3'. | [13 . . .],4(?) ŠÚ | 10+[X M]ÚL-BABBAR <i>ina</i> MAŠ-MAŠ UŠ 16 [<i>ina</i> ZALÁG GU ₄ -UD SIG SI] |
| 4'. | [1] 1 ^r 4 ¹ x,10 GE ₆ | (erasure) |
| 5'. | 14 11,10 <i>na</i> | (erasure) |
| 6'. | 27 21,50 | |
| 7'. | zíz 30 17,40 | [...] <i>ina</i> ZALÁG <i>dele</i> - <i>bat</i> SIG SI 1 KÙŠ 4 [S]I 5 USAN AN SIG <i>nu-nu</i> 2 KÙŠ |
| 8'. | 13 10 UŠ ŠÚ | [...] GU ₄ -UD <i>ina</i> NIM i]na GU ŠÚ 15 [U]SAN AN SIG MÚL IGI šá SAG HUN 2 KÙŠ |
| 9'. | 14 2,30 ME | [...] <i>ina</i> ZÁLAG <i>dele</i> - <i>bat e</i>] 1 ^r SUHUR ¹ IGI 1 [K]ÙŠ 8 u |
| 10'. | [1] 1 ^r 4 ¹ 2 <i>na</i> | GE ₆ 1 ^r 18 ¹ [<i>ina</i> ZÁLAG <i>dele</i> - <i>bat e</i>] 1 ^r SUHUR ¹ [ár 1] 1/2 KÙŠ 24 USAN AN SIG MÚL ár(?) šá SAG(?) [HUN . . .] 1/2 KÙŠ |
| 11'. | 15 13 GE ₆ | GE ₆ 28 USAN MÚL-BABBAR <i>e</i> M[ÚL IGI šá] še-pét MAŠ-MAŠ 10 SI |
| 12'. | 28 12,10 | |
| 13'. | ŠE 30 11,40 29 | 4 USAN AN SIG MÚL ár šá SAG H[UN X]+1 KÙŠ 10 GENNA <i>ina</i> LU ŠÚ |
| 14'. | 14 12,10 ME | 12 GU ₄ -UD <i>ina</i> ŠÚ <i>ina</i> LU IGI |
| 15'. | 14 4,40 ŠÚ | GE ₆ 13 USAN MÚL-BABBAR <i>e</i> MÚL ár šá 1 ^r še-pét MAŠ ¹ -MAŠ 10 SI |
| 16'. | 15 3 GE ₆ | |
| 17'. | 15 3,50 <i>na</i> | 24 USAN GU ₄ -UD SIG MÚL-MÚL 2/3 K[ÙS] |
| 18'. | 2 ^r 8(?) ¹ 14,10 | 25 USAN AN SIG MÚL-MÚL 1 KÙŠ [.] |
-

Under Edge

1. *meš-hi šá MU-1,10-KÁM¹ S[e-lu-ku (?)].]*

Translation

Obverse

1. [Nisan, . . . , . . . sunset to moonset]. Night of the 6th, first part of the night, Venus 2 $\frac{1}{2}$ cubits below Beta Tauri. The 8th [first part of the night, Venus above Zeta Tauri. . . .]
2. [The 15th, . . . moonrise to sunset]. The 13th, first part of the night, Venus above Eta Geminorum [. . . .]
3. [The 15th, . . .]+10 moonset to sunrise. The 15th, Jupiter's last visibility in the Chariot. The 18th, first part of the night, Venus 4 [cubits] above Geminorum.
4. [The 1]6th, 6,50 sunset to moonrise. The 23rd, Mercury's last visibility in the west in the Chariot.
5. The 16th, 8,10 sunrise to moonset. The 26th, first part of the night, Venus 4 cubits below Alpha Geminorum.
6. The 27th, 21,40 moonrise to sunset.
7. 10,20 The 29th, Mars stationary in Libra. The 27th, Sirius's [last visibility].
-
8. Ayyaru, 1, 23,40 sunset to moonset. 9,50. The 2nd(?), first part of the night, Venus 1+[. . .] cubits below Beta Geminorum.
9. The 14th, 15,10 moonrise to sunset. Night of the 13th, first part of the night, Venus $\frac{2}{3}$ cubit above Delta Cancri.
10. The 14th, 3,50 moonset to sunrise. The 14th, at 30+[. . .] degrees after sunrise eclipse of the moon (because of) the node it will pass by.
11. The 15th, 1 sunset to moonrise. The 13+[. . .]th [Jupiter's] first visibility [in the beginning of Gemini.
12. The 15th, 7,40 sunrise to moonset. [The . . . th, first part of the night, Ven]us 3[$\frac{1}{2}$] cubits below Epsilon Leonis. The 25th, Mercury's first visibility in the east in Gemini.
13. The 27th, 10(?) moonrise to sunset(?). [. The 2]8th(?), 51(?) degrees before sunset, an eclipse of the sun is to be watched for.
-
14. Simānu, 30, 15,10+[. . . sunset to moonset]. [The . . . th, first part of the night, Ven]us $\frac{5}{6}$ cubit above Alpha Leonis.
15. The 14th, 8,50 moonset to sunrise. [.] (erasure)
16. The 15th, 5,30 moonrise to sunset. [The . . . th, first part of the night], Venus $\frac{1}{2}$ cubit above Rho Leonis. The 12th, Mercury's last visibility in the west in Cancer.
17. The 15th, 4,10 sunrise to moonset. [.] The 11th, solstice.
18. The 16th, 5,10 sunset to moonrise. [The . . . th, first part of the night], Venus 4 cubits [below] Theta Leonis.
19. The 27th, 19 moonrise to sunset. [The . . . th], first part of the night, Venus above Beta V[irginis].

20. [The . . . th], first part of the night, Mars below Delta Scorpii 8 fingers.

21. Du²uzu, 1, [. . .] [.]

Reverse

- 1'. [Tebētu, . . . , . . .], 50 sunset to moonset. [.]
 2'. [The 13th, . . .]+x moonrise to sunset. [.]
 3'. [The 13th, . . .]+4(?) moonset to sunrise. The 10+[. . . th, J]upiter stationary in Gemini. The 16th [last part of the night, Mercury below Beta Capricorni]
- 4'. [The 1]4th(?), x, 10 sunset to moonrise.
 5'. The 14th, 11, 10 sunrise to moonset.
 6'. The 27th, 21, 50 <moonrise to sunset>.
-
- 7'. Šabātu, 30, 17, 40 <sunset to moonset>. [The . . . th, first part of the night, Venus] 1 cubit 4 fingers [below] Beta Capricorni. The 5th, first part of the night, Mars 2 cubits below Eta Piscium.
 [The . . . th, Mercury's] last visibility [in the east] in Aquarius. The 15th, first part of the night, Mars 2 cubits below Beta Arietis.
- 8'. The 13th, 10 degrees moonset to sunrise.
 9'. The 14th, 2, 30 moonrise to sunset. [The . . . th, last part of the night, Venus] 1 cubit 8 fingers [above] Gamma Capricorni.
 Night of the 18th, [last part of the night, Venus] 1½ cubits [above] Delta Capricorni. The 24th, first part of the night, Mars [4]½ cubits below Alpha [Arietis].
- 10'. The 14th, 2 sunset to moonset.
 11'. The 15th, 13 sunset to moonrise. Night of the 28th, first part of the night, Jupiter 10 fingers above Eta Geminorum.
-
- 12'. The 28th, 12, 10 <moonrise to sunset>.
- 13'. Addaru, 30, 11, 40 sunset to moonset. 29. The 4th, first part of the night, Mars [. . .] + 1 cubits below Alpha Arietis. The 10th, Saturn's last visibility in Aries.
- 14'. The 14th, 12, 10 moonrise to sunset. The 12th, Mercury's first visibility in the west in Aries.
- 15'. The 14th, 4, 40 moonset to sunrise. Night of the 13th, first part of the night, Jupiter 10 fingers above Mu Geminorum.
-
- 16'. The 15th, 3 sunset to moonrise.
 17'. The 15th, 3, 50 sunrise to moonset. The 24th, first part of the night, Mercury ⅔ cubit below Eta Tauri [.]
- 18'. The 28th(?), 14, 10 <moonrise to sunset>. The 25th, first part of the night, Mars 1 cubit below Eta Tauri [.]

Under Edge

1. predictions for year 70 of the Se[leucid Era]

Notes**Obverse**

- 1 ff.: The copyist of this text and this writer have both benefited from an unpublished preliminary transcription by the late A. J. Sachs.
- 1: After the sign bar the number 1 or 30 is to be restored. The numbers 1 or 30 following the month name indicate that the month began on the 31st or 30th day of the previous month. See A. J. Sachs, "A Classification of the Babylonian Astronomical Tablets of the Seleucid Period," *JCS* 2 (1948), p. 278 §16.
- ŠUR SI is an abbreviation of ŠUR GIGIR šá SI.
- The restoration of the end of the line is the logical consequence of the conjunctions listed in obv. 1 and 2, although it must be admitted that the text does not deal with every conjunction between Venus and a Normal Star.
- 3: The Chariot is a part of the constellation Taurus (specifically β and Ζ Tauri). For details see S. Parpola, *Letters from Assyrian Scholars to the Kings Esarhaddon and Assurbanipal*, pt. 2, AOAT 5/2 (Neukirchen-Vluyn, 1983), pp. 290–91.
- 7: On the significance of the number 10,20 see N. A. Roughton's remarks on p. 333 below. On Sirius dates see A. J. Sachs, "Sirius Dates in Babylonian Astronomical Texts of the Seleucid Period," *JCS* 6 (1952), pp. 105–14.
- 8: The term TAB appears to be a variant of the usual *na* (sunset to moonset on the first day of the month). On the significance of the number 9,50 see N. A. Roughton's remarks on p. 333 below.
- 11: A. J. Sachs had transliterated 2(?)2(?), with the annotation, "expected: ca. 17." See N. A. Roughton's calculation below.
- 12: The restoration 3[½] follows Sachs.
- 13: The restoration of the second half of the line follows Sachs. The reading of the time interval between the eclipse and sunset as '5(?)1(?) ME(?)¹ [ana(?) Š]Ú(?) '20(?)¹ was taken into account in J. M. Steele, "Solar Eclipse Times Predicted by the Babylonians," *Journal for the History of Astronomy* 28 (1997), pp. 133–39. He estimates the predicted time for the beginning of the eclipse (51 degrees before sunset) to correspond to a Local Time of 15.73 hours, which compares with a modern calculation of the beginning of the eclipse at 11.03 hours. Such a discrepancy is within the range identified by Steele from other Babylonian eclipse predictions. The restoration '5(?)1(?) ME(?)¹ is admittedly uncertain, but the point to be derived from Steele's calculations is that if anything, one would have hoped for a number higher than 51.
- 16: MÚL TUR is an abbreviation of MÚL TUR šá 4 KÙŠ ár LUGAL.
- 17: On the date of the solstice see O. Neugebauer, "Solstices and Equinoxes in Babylonian Astronomy during the Seleucid Period," *JCS* 2 (1948), pp. 209–22.

Reverse

- 3': SI is an abbreviation for SI MÁŠ. See Note to l. 7' below. The restoration of the second half of the line follows Sachs.

- 7': nu-nu is an abbreviation of MÚL KUR ŠÁ DUR *nu-nu* = Eta Piscium.
 9': SUḪUR IGI is an abbreviation for MÚL IGI ŠÁ SUḪUR-MÁŠ.
 13': LU, here and in the following line, is presumably a graphic variant for ḪUN. On the significance of the number 29 see N. A. Roughton's remarks below.

Remarks

The tablet belongs to the category named by A. J. Sachs, "Normal-Star Almanacs" (see A. J. Sachs, "A Classification of the Babylonian Astronomical Tablets of the Seleucid Period," *JCS* 2 [1948], pp. 271–90). For each month the almanac gives the following in the first column: the month name; a number, 1 or 30, indicating that the month began on the 31st or 30th day of the previous month; and the date (except on day 1) and interval in time-degrees (UŠ) of the six lunar phenomena to which Sachs has given the name Lunar Sixes. These are: (1) the interval between sunset and moonset on the first evening of the month (in other astronomical texts this interval is generally referred to as *na* but in this text as TAB), (2) the interval between moonset and sunrise when the moon set for the last time before sunrise (ŠÚ), (3) the interval between sunrise and moonset when the moon set for the first time after sunrise (*na*), (4) the interval between moonrise and sunset when the moon rose for the last time before sunset (ME), (5) the interval between sunset and moonrise when the moon rose for the last time before sunset (GE₆), (6) the interval between moonrise and sunrise when the moon was visible for the last time (KUR). The order of phenomena (2)–(5) varies from month to month.

In the second column the almanac gives details of solstices and equinoxes, lunar and solar eclipses, the rising of Sirius, the heliacal rising and setting of the planets and their stationary points, and the conjunctions of planets with certain fixed stars. A total of thirty-two fixed stars are normally used in Late Babylonian astronomical texts to record the position of the moon and planets, and since the work of J. Epping (*Astronomisches aus Babylon* [Freiburg, 1889], p. 115), they have been known as "Normal Stars." For a full list of these stars see most recently Sachs and Hunger, *Astronomical Diaries*, pp. 17–19. The distances between planets and the Normal Stars are given in cubits (KÙŠ = *ammatu*) and fingers (SI or U = *ubānu*) above (north?) or below (south?), in front (east?) or behind (west?). The cubit seems to have corresponded to 2° or 2.5°, and the finger to 5' or 10'. It should be noted that the whole question of the exact meaning of the terms "above" and "below," "in front" and "behind," has been much debated without agreement on any precise definition.

Although, as the term almanac would suggest, it was assumed by Sachs that texts of the class of Normal-Star Almanac contained predictions (and the phrase *ana PAP*, "to be watched for," in obv. 13 supports this view), it is far from clear how the precise calculations of the positions of the planets relative to the Normal Stars would have been made. On the calculation of the Lunar Six data see text No. 81.

A fragment of the Astronomical Diary for the month Ayyaru of 241 B.C. survives, and it is published in Sachs and Hunger, *Astronomical Diaries* 1, pp. 76–77. The Diary contains references to Jupiter's first appearance in the end of Taurus around the 16th, to Mercury's first appearance in the east in Gemini around the 28th, and to the solar eclipse (on the 28th). This data has been taken into account in the restorations and calculations given here.

Professor N. A. Roughton of the Department of Physics, Regis University, Denver, Colorado, has made the following calculations of the Lunar Six data and planetary data according to modern theory for comparison with the data recorded by Babylonian observers. See the table below for his comments on the data in obv. 7 and 8 and rev. 13'. The calculated times of events are expressed in hours and decimal fractions of hours.

Line	Babylonian date (month, day)	Julian date	Interval*	Calculated interval (minutes)	Babylonian interval (minutes)
------	------------------------------------	----------------	-----------	-------------------------------------	-------------------------------------

*Lunar data: mr = moonrise, ms = moonset, sr = sunrise, ss = sunset

Obverse

4	i/16	-241/v/3	ss→mr	34.3	27.3
5	i/16	-241/v/4	sr→ms	42.8	32.7
6	i/27	-241/v/15	mr→sr	98.5	86.7
7 ^a	i/28	-241/v/16	mr→sr	55.7	41.3
8	ii/1	-241/v/18	ss→ms	111.4	94.7
8 ^b	i/30	-241/v/17	ss→ms	50.0	39.3
9	ii/14	-241/v/31	mr→ss	55.1	60.7
10	ii/14	-241/vi/1	ms→sr	14.2	15.3
11	ii/15	-241/vi/1	ss→mr	3.1	4.0
12	ii/15	-241/vi/2	sr→ms	37.1	30.7
13	ii/27	-241/vi/14	mr→sr	74.4	40.0
14	iii/1	-241/vi/16	ss→ms	69.3	60.7
15	iii/14	-241/vi/30	ms→sr	36.4	35.3
16	iii/15	-241/vi/30	mr→ss	28.1	22.0
17	iii/15	-241/vii/1	sr→ms	24.4	16.7
18	iii/16	-241/vii/1	ss→mr	22.9	20.7
19	iii/27	-241/vii/13	mr→sr	100.6	76.0

Reverse

5'	x/14	-240/i/24	sr→ms	37.2	44.7
6'	x/27	-240/ii/6	mr→sr	82.2	87.3
7'	xi/1	-240/ii/8	ss→ms	73.9	70.7
8'	xi/13	-240/ii/21	ms→sr	28.3	40.0
9'	xi/14	-240/ii/21	mr→ss	9.8	10.0
10'	xi/14	-240/ii/22	sr→ms	4.9	8.0
11'	xi/15	-240/ii/22	ss→mr	45.5	52.0
12'	xi/28	-240/iii/7	mr→sr	56.4	48.7
13 ^c	xii/1	-240/iii/8	ss→ms	46.4	46.7
14'	xii/14	-240/iii/21	mr→ss	45.5	48.7
15'	xii/14	-240/iii/22	ms→sr	16.0	18.7
16'	xii/15	-240/iii/22	ss→mr	8.0	12.0
17'	xii/15	-240/iii/23	sr→ms	15.6	15.3
18'	xii/28	-240/iv/5	mr→sr	69.0	56.7

Notes to the Table

Obverse

7^a: The 10,20 that appears in this line seems to be the sr→mr interval on the evening that begins on the 28th day of Month 1. The last crescent should have been visible.

^{8b}: The 9,50 that appears across the vertical dividing line appears to be the ss→ms interval on the evening of the day before the 1st day of month 2. The 1st crescent should have been visible.

Reverse

13^c: The 29 on the vertical dividing line might indicate that the 1st day of month 12 could have followed the 28th day of month 11.

Planetary Data

Calculations for planetary conjunctions with fixed stars are made for the moment when the sun has altitude -10° . The altitudes of planets and stars are corrected for refraction. Calculations for first and last visibilities of planets and of Sirius are made for the moment when the sun has altitude -83° .

Conventions: long = longitude; lat = latitude; RA = right ascension; dec = declination; az = azimuth (0° north); alt = altitude; ET = ephemeris time; S.E. = Seleucid Era

Venus above Zeta Tauri						
	S.E. 70/i/8		Julian -241/iv/25		ET = 20.1	
	long	lat	RA	dec	az	alt
Venus	54.8	0.9	52.2	20.1	285.2	14.0
star	53.6	-2.5	51.9	16.5	282.2	11.9

sun 10° below western horizon
angle between Venus and Zeta Tauri: 3.6°

Obv. 2	Venus above Eta Geminorum					
	S.E. 70°/i/13		Julian -241/iv/30		ET = 120.1	
	long	lat	RA	dec	az	alt
Venus	60.9	1.1	58.5	21.7	286.4	15.0
star	62.3	-1.2	60.5	19.7	283.7	15.7
	sun 10° below western horizon					
	angle between Venus and Eta Geminorum: 2.7°					

Obv. 3	Jupiter's last visibility in the Chariot					
	S.E. 70/i/15		Julian -241/v/2			ET = 19.4
	long	lat	RA	dec	az	alt
Jupiter	45.4	-0.6	43.1	16.1	284.5	7.3
	sun .83 degrees below western horizon					
Obv. 3	Venus above Gamma Geminorum					
	S.E. 70/i/18		Julian -241/v/5			ET = 20.2
	long	lat	RA	dec	az	alt
Venus	66.9	1.3	64.8	23.0	287.4	16.1
star	67.9	-7.0	67.3	15.0	279.0	14.1
	sun 10° below western horizon					
	angle between Venus and Gamma Geminorum: 8.4°					
Obv. 4	Mercury's last visibility in the west in the Chariot					
	S.E. 70/i/23		Julian -241/v/10			ET = 19.5
	long	lat	RA	dec	az	alt
Mercury	57.2	-0.7	55.0	19.1	285.8	11.1
	sun .83 degrees below western horizon					
Obv. 5	Venus below Alpha Geminorum 4 cubits					
	S.E. 70/i/6		Julian -241/iv/23			ET = 20.3
	long	lat	RA	dec	az	alt
Venus	76.6	1.5	75.2	24.6	288.4	17.6
star	79.2	9.9	77.23	33.1	295.7	23.0
	sun 10° below western horizon					
	angle between Venus and Gamma Geminorum: 8.7°					
Obv. 7	Last visibility of Sirius					
	S.E. 70/i/27		Julian -241/v/14			ET = 19.5
	long	lat	RA	dec	az	alt
Sirius	73.6	-39.2	76.8	-16.2	246.5	6.0
	sun .83 degrees below western horizon					
Obv. 7	Mars stationary in Libra					
	S.E. 70/i/29		Julian -241/v/16			ET = 20.3
	long	lat	RA	dec	az	alt
Mars	194.0	-0.5	192.7	-6.1	138.4	42.2
	sun .83 degrees below western horizon					
	True date of station: -241/v/25					

Obv. 8	Venus below Beta Geminorum									
	S.E. 70/ii/2		Julian -241/v/19		ET = 20.4					
	long	lat	RA	dec	az	alt				
Venus	83.8	1.7	83.1	25.3	288.7	18.5				
star	82.5	6.4	81.3	29.9	293.8	19.3				
	sun 10° below western horizon									
	angle between Venus and Beta Geminorum: 4.9°									
Obv. 9	Venus above Delta Cancri $\frac{2}{3}$ cubit									
	S.E. 70/ii/13		Julian -241/v/30		ET = 20.5					
	long	lat	RA	dec	az	alt				
Venus	96.9	1.9	97.6	25.4	288.1	19.8				
star	97.6	-0.0	98.3	23.5	286.1	19.4				
	sun 10° below western horizon									
	angle between Venus and Delta Cancri: 2.0°									
Obv. 11	Jupiter's first visibility in the beginning of Gemini ^d									
	Day 16 taken from Diary -241 (Sachs-Hunger, <i>Astronomical Diaries</i> 1, p. 77) ^e									
	S.E. 70/ii/16		Julian -241/vi/3		ET = 5.6					
	long	lat	RA	dec	az	alt				
Jupiter	52.6	-0.6	50.3	18.1	74.1	8.9				
	sun .83° below eastern horizon									
Obv. 12	Mercury's first visibility in the east in Gemini									
	Day 28 taken from Diary -241 (Sachs-Hunger, <i>Astronomical Diaries</i> 1, p. 77)									
	S.E. 70/ii/28		Julian -241/vi/15		ET = 5.6					
	long	lat	RA	dec	az	alt				
Mercury	58.0	-2.2	56.2	17.8	76.9	12.9				
	sun .83° below eastern horizon									
Obv. 13	Solar eclipse									
	S.E. 70/ii/28		Julian -241/vi/15							
	F. R. Stephenson of the University of Durham has calculated that the eclipse began at 11.00 (local time, not Ephemeris Time), reached 98° (almost total) at 12.66 (= 12.40 pm) at an altitude of 77°, and ended at 14.24 (= 2.15 pm).									
Obv. 16	Mercury's last visibility in the east in Cancer									
	S.E. 70/iii/12		Julian -241/vi/28		ET = 5.6					
	long	lat	RA	dec	az	alt				
Mercury	79.3	0.5	78.3	23.8	67.3	8.8				
	sun .83° below eastern horizon									

Obv. 17 Solstice

	S.E.	Julian				ET =		
	70/iii/11	-241/vi/26	long	lat	RA	dec	az	alt
sun	89.4	0.0	89.3		23.7		299.1	-0.8
sun .83° below eastern horizon								
True date of solstice -241/vi/27								

Rev. 3' Mercury below Beta Capricorni

	S.E.	Julian				ET =		
	70/x/16	-240/i/26	long	lat	RA	dec	az	alt
Mercury	275.7	0.2	276.2		-23.4		125.7	9.4
star	272.9	4.8	273.1		-18.9		124.2	14.7
sun 10° below western horizon								
angle between Mercury and Beta Capricorni: 5.4°								

Rev. 7' Mars below Eta Piscium 2 cubits

	S.E.	Julian				ET =		
	70/xi/5	-240/ii/12	long	lat	RA	dec	az	alt
Mars	357.2	-0.3	357.6		-1.3		249.6	26.4
star	355.7	5.3	354.0		3.1		256.0	26.1
sun 10° below western horizon								
angle between Mars and Eta Piscium: 5.7°								

Rev. 8' Mars below Beta Arietis 2 cubits

	S.E.	Julian				ET =		
	70/xi/15	-240/ii/22	long	lat	RA	dec	az	alt
Mars	4.3	-0.1	4.0		1.6		255.7	24.0
star	2.8	8.4	359.2		8.8		265.2	23.9
sun 10° below western horizon								
angle between Mars and Beta Arietis: 8.7°								

Rev. 10' Venus above Delta Capricorni 1½ cubits

	S.E.	Julian				ET =		
	70/xi/18	-240/ii/26	long	lat	RA	dec	az	alt
Venus	290.8	0.6	292.5		-21.5		129.7	16.3
star	292.3	-2.2	294.5		-24.0		130.2	13.2
sun 10° below eastern horizon								
angle between Venus and Delta Capricorni: 3.2°								

Rev. 10' Mars below Alpha Arietis [4]½ cubits^f

S.E.	Julian	ET =
70/xi/25	-240/iii/3	19.5

Rev. 13'	Mars below Alpha Arietis					
	S.E. 70/xii/4 Julian -240/iii/11			ET = 19.6		
	long	lat	RA	dec	az	alt
Mars	16.9	0.1	15.6	6.8	265.9	19.1
star	6.5	9.9	1.9	11.7	277.4	10.3
	sun 10° below western horizon					
	angle between Mars and Alpha Arietis: 14.3°					

Rev. 13'	Last visibility of Saturn in Aries					
	S.E. 70/xii/10 Julian -240/iii/17				ET = 18.9	
	long	lat	RA	dec	az	alt
Saturn	0.0	-2.3	1.0	-2.1	264.0	5.6
	sun .83° below western horizon					

Rev. 14' Mercury's first visibility in the west in Aries
 S.E. 70/xii/12 Julian -240/iii/19 ET = 18.9
 long lat RA dec az alt
 Mercury 7.1 0.8 6.1 3.6 267.2 11.0
 sun .83° below western horizon

Rev. 15'	Jupiter above Mu Geminorum 10 fingers					
	S.E. 70/xii/13		Julian -240/iii/20		ET = 19.7	
planet	long	lat	RA	dec	az	alt
	64.0	-0.1	62.0	21.1	259.1	56.5
star	64.2	-1.0	62.3	20.2	257.3	56.3
	sun 10° below western horizon					
	angle between Jupiter and Mu Geminorum: 1.0°					

Rev. 17' Mercury below Eta Tauri $\frac{2}{3}$ cubit

	S.E. 70/xii/24		Julian -240/iii/31			ET = 19.8
	long	lat	RA	dec	az	alt
Mercury	27.2	2.6	24.3	13.0	278.9	10.5
star	28.9	3.8	25.4	14.8	279.9	12.3
sun 10° below western horizon						
angle between Mercury and Eta Tauri: 2.1°						

Rev. 18' Mars below Eta Tauri 1 cubit

	S.E. 70/xii/25		Julian -240/iv/1			ET = 19.8
	long	lat	RA	dec	az	alt
Mars	31.4	0.3	29.1	12.4	276.4	13.2
star	28.9	3.8	25.4	14.8	280.4	11.4
sun 10° below western horizon						
angle between Mars and Eta Tauri: 4.3°						

Notes to the Table

Obverse

11^d: If we assume that the zero points of the zodiacal signs were defined with respect to the Normal Stars for this text (since it is not an ephemeris), then it is reasonable to assign the beginning of Aries to about 352°, of Gemini to about 52°, etc. (see O. Neugebauer, *A History of Ancient Mathematical Astronomy*, Studies in the History of Mathematics and Physical Sciences 1 [New York, 1975], p. 546 and fig. 4, p. 1316). For evidence from Star Catalogue BM 46803 see A. J. Sachs, "A Late Babylonian Star Catalogue," *JCS* 6 (1952), pp. 146–50.

11^e: We expect that the data of Normal Star Almanacs is calculated, probably by application of well-known period relations to the data contained on Goal-Year texts, or on true observations contained in earlier Diaries dated to the appropriate sections of Goal-Year texts. Since this is the case, we would not normally take the date of an event from a Diary for a concurrent year. In this case however, the Jupiter event extracted from the Diary also appears to have been calculated, as evidenced by use of the Akkadian term *in*.

Reverse

10^f: If the data of Normal-Star almanacs is calculated, then we can attribute the large disparities of longitudes of Mars and the Normal Stars in these events to scribal errors.

83.

MMA 86.11.354

Almanac for A.D. 31/32

Plates 109, 110

Parthian period, (Babylon)

H. 100 mm W. 95 mm Th. 34 mm

Publication: A. J. Sachs, "The Latest Datable Cuneiform Texts," in *Studies Kramer*, pp. 379–98

Upper Edge

ina a-mat^dEN u GAŠAN-iá liš-lim

Obverse

1. BAR 30 'GENNA¹ u AN *ina MAŠ 1 dele-bat MAŠ KUR <13(?) AN(?)>-KU₁₀(?) x [. 14(?) na]*
2. 23 'GU₄¹ 25 MÚL 29(!) <AN(?)>-K[U₁₀(?)]
3. 'GU₄ 30¹ MÚL <*ina*> 'MUL¹ *dele-bat ina ALLA 15 gu₄ ina [. 15(?) na 18(?)]*
4. 'AN ALLA¹ KUR 25 GENNA *ina MAŠ(!) ŠU[27(?) KUR]*
5. SIG 1 MÚL [*ina MÚL dele-b*]at *ina A AN <ina> ALLA(?) 6 [GU₄ ina ALLA IGI 10(?) AN ina ALLA ŠU 14(?) na 18(?) GU₄-UD A KUR 27(?) KUR]*
6. ŠU 30 MÚL-B[ABBAR(?) *ina M]ÚL-MÚL dele-bat u GU₄ ina 'A(?)¹ [5(?) GENNA ina ALLA IGI]*
7. 15 na 18 GU₄ *ina A <ŠU 22(?)> dele-bat <ina> A ŠU [27(?) KUR]*
8. [I]ZI 1 MÚL *ina 'MÚL GENNA¹ ina ALLA 11(?) [dele-bat ina A IGI 11(?) GU₄ ina A IGI 14(?) na 27(?) GU₄ ABSIN KUR 27(?) KUR]*
9. [KIN] '30 MÚL-BABBAR¹ [*ina M]ÚL dele-ba[t] ina A GU₄ [ina ABSIN GENNA ina ALLA 1(?) GU₄ ina ABSIN ŠU 1(?) MÚL-BABBAR ina MÚL UŠ]*
10. [14(?) na] 17 A[N *ina ABSIN IGI(?) 27(?) KUR]*
11. [DU₆] x x [.]
(perhaps one line broken away at bottom of obverse)

Reverse

1. [.] x [.]
2. [.] x 25 [GU₄ *ina GÍR-TAB IGI(?) 27(?) KUR*]
3. [GAN] '30 MÚL-BABBAR MÚL¹ *dele-bat u G[U₄ ina P]A(?) 'GENNA¹ [ina ALLA]*
4. 12 GU₄ *ina NIM ina MÁŠ ŠU 14 n[a 25(?) dele-bat PA KUR 26(?) GENNA ana ME E-A 27(?) KUR]*
5. AB 30 MÚL-BABBAR MÚL <*dele*>-bat u GU₄ *ina PA GENNA [ina ALLA 1(?) MÚL-BABBAR ina MÚL UŠ 4(?) GU₄ MÁŠ KUR]*
6. 8 <GU₄> *ina ŠU 14 na 2[1(?) dele-bat MÁŠ KUR 27(?) KUR]*
7. [Z]ÍZ 1 MÚL-BABBAR MÚL *dele-bat ina MÁŠ <GENNA ina ALLA> AN(?) ina(?) [PA 7(?) GU₄ zib KUR 9(?) GU₄ ina zib IGI]*
8. '1'4 na 14 *dele-bat GU <KUR 19(?) AN MÁŠ KUR> 27 [KUR 29(?) GU₄ HUN KUR]*
9. ŠE 30 MÚL-BABBAR MÚL GENNA ALLA *dele-b[at GU GU₄ HUN 4(?)]*
10. [G]U₄ *ina HUN ŠU 12(?) dele-bat zib KUR [14(?) na 27(?) KUR]*
11. [BAR] 30 *meš-<hi> šá KUR-<MEŠ> šá UDU-<IDIM-MEŠ šá MU-2-me-1,18> šá ši-i [MU-3-me-42]*

Translation

Upper Edge: Epigraph

1. At the command of the deities Bēl and Bēltīya, may it go well.

Obverse

- 1–2. Month I, the 1st of which will follow the 29th of the previous month. Saturn and Mars in Gemini. On the 1st, Venus will reach Gemini. (On the 13th(?)), eclipse(?) (of the moon(?).) [On the 14th(?), moonset after sunrise.] On the 23rd, Mercury (will be visible for the first time in the east in Aries). On the 25th, Jupiter (will be visible for the first time in Taurus). (On the 27th(?), last lunar visibility before sunrise.) On the 29th, eclipse(?) [of the sun(?)]
- 3–4. Month II, the 1st of which will follow the 29th of the previous month. Jupiter (in) Taurus, Venus in Cancer. On the 15th, Mercury [will be visible for the last time in the east in Aries(?). On the 15th(?), moonset after sunrise. On the 18th(?), Mars] will reach Cancer. On the 25th, Saturn will be visible for the last time in Gemini. [On the 27th(?), last lunar visibility before sunrise.]
5. Month III, the 1st of which will follow the 30th of the previous month. Jupiter in Ta[urus, Ve]nus in Leo, Mars in Cancer. On the 6th, [Mercury will be visible for the first time in the west in Cancer. On the 10th(?), Mars will be visible for the last time in Cancer. On the 14th(?), moonset after sunrise. On the 18th(?), Mercury will reach Leo. On the 27th(?), last lunar visibility before sunrise].
- 6–7. Month IV, the 1st of which will follow the 29th of the previous month. Jupiter in Taurus, Venus and Mercury in Leo. [On the 5th(?), Saturn will be visible for the first time in Cancer.] On the 15th, moonset after sunrise. On the 18th, Mercury (will be visible for the last time in the west) in Leo. (On the 22nd(?),) Venus will be visible for the last time (in the west) in Leo. On the 27th(?), last lunar visibility before sunrise.
8. Month V, the 1st of which will follow the 30th of the previous month. Jupiter in Taurus, Saturn in Cancer. On the 11th(?), [Venus will be visible for the first time (in the east) in Leo. On the 11th(?), Mercury will be visible for the first time (in the east) in Leo. On the 14th(?), moonset after sunrise. On the 27th(?), Mercury will reach Virgo. On the 27th(?), last lunar visibility before sunrise].
- 9–10. [Month VI,] the 1st of which will follow the 29th of the previous month. Jupiter [in] Taurus, Venus in Leo, Mercury [in] Virgo, Saturn in Cancer. On the 1st(?), Mercury will be visible for the last time (in the east) in Virgo. On the 1st(?), Jupiter will reach its (first) stationary point in Taurus. On the 14th(?), moonset after sunrise]. On the 17th, Ma[rs will be visible for the first time in Virgo(?). On the 27th(?), last lunar visibility before sunrise].
11. [Month VII,] [.]

Reverse

- 1–2. [.] On the 25th, [Mercury will be visible for the first time (in the east) in Scorpius(?). On the 27th(?), last lunar visibility before sunrise].
- 3–4. [Month IX,] the 1st of which will follow the 29th of the previous month. Jupiter in Taurus, Venus and Mer[cury in Sagittar]ius(?) (or [Scorp]ius(?)), Satur[n in Cancer]. On the 12th, Mercury will be visible for the last time in the east in Capricorn. On the 14th, moon[set after sunrise. On the 25th(?), Venus will reach Sagittarius. On the 26th(?), acronychal rising of Saturn. On the 27th(?), last lunar visibility before sunrise].
- 5–6. Month X, the 1st of which will follow the 29th of the previous month. Jupiter in Taurus, Venus and Mercury in Sagittarius, Saturn [in Cancer. On the 1st(?), Jupiter will reach its (second) stationary point in Taurus. On the 4th(?), Mercury will reach Capricorn].

- 7–8. Month XI, the 1st of which will follow the 30th of the previous month. Jupiter in Taurus, Venus in Capricorn, (Saturn in Cancer,) Mars in [Sagittarius. On the 7th(?), Mercury will reach Pisces. On the 9th(?), Mercury will be visible for the first time (in the west) in Pisces]. On the 14th, moonset after sunrise. (On the 19th(?), Mars will reach Capricorn.) On the 27th, [last lunar visibility before sunrise. On the 29th(?), Mercury will reach Aries].
- 9–10. Month III, the 1st of which will follow the 29th of the previous month. Jupiter in Taurus, Saturn in Cancer, Venu[s in Aquarius, Mercury in Aries. On the 4th(?), Me]rcury will be visible for the last time (in the west) in Aries. On the 12th, Venus will reach Pisces. On the 1[4th(?), moonset after sunrise. On the 27th(?), last lunar visibility before sunrise].
11. [(The following year,) month I,] the 1st of which will follow the 29th of the previous month. Pred(ictions) of the entri(es) of the pl(anets into zodiacal signs for year 278 of the Arsacid Era), which equals [year 342 of the Seleucid Era].

Notes

1 ff.: The transliteration and translation given above follow Sachs's published edition, with minor adjustments to reflect the new copy. It should be observed that in some cases Sachs's restorations may contain rather more text than there was room for on the tablet; they are an indication of the additional predictions one would have expected to find made for the months in question. In all probability the scribe simply omitted data or lines.

Reverse

- 4: The item for the 12th day of the month is misplaced, being one month too early.

Remarks

The general character of the Late Babylonian almanacs was described by A. Sachs in "A Classification of the Babylonian Astronomical Tablets of the Seleucid Period," *JCS* 2 (1948), pp. 277–80. Normally they give predictions month by month for: (1) three lunar phenomena (the length of the previous month, the date [around the middle of the month] when the moon set for the first time after sunset, and the date of the moon's last visibility); (2) the date and zodiacal sign of the first and last visibility, stationary points and opposition of the five planets; (3) the dates when planets enter new zodiacal signs; (4) the planetary positions by reference to zodiacal signs at the beginning of the month; (5) the dates of solstices and equinoxes; (6) the dates of first and last visibilities of Sirius; and (7) data about lunar and solar eclipses. The dates of solstices, equinoxes, and Sirius phenomena are fixed according to a scheme standard throughout the Seleucid Period.

In this text the seasonal phenomena (Sirius, equinoxes, and solstices) are omitted, but eclipses seem to be included. As pointed out by Sachs in his edition, the text uses some unusual terminology. It frequently uses MÚL instead of MÚL-BABBAR for Jupiter; MÚL is often used also for MÚL-MÚL (the Pleiades); MAŠ is abbreviated for MAŠ-MAŠ (Gemini); abbreviations in the terminology for the first and last visibility of Venus and Mercury occur frequently; and eclipses seem to be referred to by KU₁₀ instead of AN-KU₁₀.

The data given in the text for the characteristic phenomena of the planets may be compared with the following approximate dates computed by Sachs (Roman numerals refer to the Babylonian months, and the significance of the

Greek letters is as follows: Γ = first visibility in the east, Σ = last visibility in the east, Ξ = first visibility in the west, Ω = last visibility in the west, Φ = first stationary point, θ = opposition, Ψ = second stationary point):

S.E. 342 = A.D. 31/32

Mercury: I 21 Γ omitted; II 2 Σ omitted; III 4 Ξ ; IV 16 Ω ; V 9 Γ ; V 28 Σ ; VII 23 Ξ ; VIII 9 Ω ; VIII 24 Γ ; X 10 Σ ; XI 9 Ξ ; XII

Venus: IV 22 Ω ; V 10 Γ

Mars: III 10 Ω 102°; VI 21 Γ 166°

Jupiter: I 28 Γ 28°; VI 1 Φ 46°; VII 30 θ 41°; X 1 Ψ 36°

Saturn: II 30 Ω 88°; IV 5 Γ 93°; VII 19 Φ 100°; IX 26 θ 97°; XII 6 Ψ 93°

84.

MMA 86.11.374A + 86.11.374B

Fragment of an Astronomical Table(?)

Plate 111

Later 1st millennium

H. 51 mm W. 41 mm Th. 29 mm (MMA 86.11.374A)

H. 45 mm W. 93 mm Th. 22 mm (MMA 86.11.374B)

Obverse(?)

1'. 'SIG ¹ x	[...]	[...]	[...]
2'. ŠU 20	15	[...]	[...]
3'. NE 9	15	[...]	[...]
4'. KIN 11	13	2 ¹ (?) ¹	[...]
5'. DU ₆ 4	16	11	26
6'. APIN 8	16	9	18
7'. GAN 10	[...] x	13	4
8'. AB 7	9	12	2
9'. zíz 23	7(?) ¹	2	12
10'. ŠE 2	[x]+4	26	9 ¹

11'. 1 <i>dele-bat</i>	[...] 'GU ₄ -UD ¹	'5(?) ¹ GENNA	[.....]
12'. 6 AN	'3 ¹ +[.....]	[.....]	[.....]
13'. 1 GENNA	'2 ¹ +[.....]	[.....]	[.....]
14'. 1 AN	'12 ¹ +[.....]	[.....]	[.....]
15'. 1 GU ₄	10 ¹ +[.....]	[.....]	[.....]
16'. x AN	'10 ¹ +[.....]	[.....]	[.....]
17'. [...] BABBAR(?)	'10 ¹ +[.....]	[.....]	[.....]
18'. x AN	[.....]	[.....]	[.....]

Reverse(?)

(traces of numbers in four lines)

Remarks

The obverse of this tablet contains in ll. 1'-10', the latter part of a list of the twelve months of the year followed by four columns of numbers, perhaps indicating a day of the month (no number exceeds thirty). These might refer to recurrent astronomical phenomena, but which phenomena cannot be determined at present.

Ll. 11'-18' contain in the first column a number followed by the name of one of the five planets, in the order Venus, Mars, Saturn, Mars, Mercury, Mars, Jupiter(?), Mars. The significance of these entries is not apparent. What little remains of the second and third columns of these lines suggests a repetition of this pattern.

85.

MMA 86.11.374D

Plate 112

H. 57 mm W. 21 mm Th. 17 mm

Obverse/Reverse(?)

1'	[...] x	[...]
2'	[...] 4,x	[...]
3'	[...] 3,30	[...]
4'	[...] 3,40	[...]
5'	[...] 2,11	[...]
6'	[...] 6, ¹ 40(?) ¹	[...]
7'	[...] 6, ¹ 50(?) ¹	[...]
8'	[...] 4	¹ 8 ¹ [...]
9'	[...] 4,11	6,10+[...]
10'	[...] 13	12,20+[...]
11'	[...] 9	4,3 ¹ 7 ¹ +[...]
12'	[...] x,1	11, ¹ 40(?) ¹ +[...]
13'	[...]	5 [...]

Fragment of a Table Containing Numbers

Later 1st millennium(?)

Remarks

This table of numbers could equally be of either mathematical or astronomical content.

86.

MMA 86.11.374C

Plate 112

H. 52 mm W. 42 mm Th. 26 mm

Unidentified Fragment

Later 1st millennium(?)

Obverse/Reverse(?)

1'. . . .] x ||
 2'. . . .] x ||
 3'. . . .] 12 ||

4'. . . .] x MU.AN.NA x [. . .
 5'. . . . al]am-^ldím(?)^l-mu(?) x [. . .
 6'. . . .] x x TA lib-b[i . . .

7'. . . .] Á AN ERÍN GU₄ *dele-bat* x [. . .
 8'. . . .] x ^r[ana(?)¹] 2,30 GU₄.UD x [. . .
 9'. . . .] x x [. . .

Remarks

Despite the reference to “year” (MU.AN.NA) in l. 4’, the list of planets (Mars, . . . , Mercury, and Venus) in l. 7’, and the reference to Mercury in l. 8’, all of which might suggest an astronomical or astrological content (and the occurrence of 2,30 if interpreted as *šumēlu*, “left,” is appropriate to an omen text), the apparent reference to the physiological omen series Alamdimmū in l. 5 is more reminiscent of a literary catalogue.

87.

MMA 86.11.411A + 86.11.411B +

Lunar Procedure Text(?)

86.11.497

Plate 113

Later 1st millennium(?)

H. 65 W. 98 Th. 24 mm

Obverse(?)

1'. [.] x x x [.]
 2'. [. KA|M me-*he-e* x x ^r1(?)^{21(?)¹} [.] ^r3¹
 3'. [.] x KUR KUR 1,31 *ki-ṣir k[i k]i-^rṣar šá EN.NUN ana IG1 šá 21 30¹
 4'. [.] *lam*(?) 2 *me* 8 *ki-ṣir [k]i ki-ṣar šá EN.NUN ana IG1 šá 23
 5'. [.] x [.] ^rki¹-*ṣir ki ki-ṣar šá EN.NUN ana IG1 šá 21 25
 6'. [.] *k]i ki-ṣar šá EN.NUN ana IG1 šá 21 2(?)3
 7'. [.] 8 *ki-ṣir ki ki-^rṣar¹ šá EN.NUN ana [IG1]*****

Reverse(?)

1'. [. *ki-ṣi]r ki ki-ṣar šá EN.NUN ana IG1
 2'. [.] x *tu 21 ki-ṣir ki ki-ṣir šá EN.NUN ana IG1 šá 22
 3'. [.] *k]i-ṣ[ir(?) ki(?) ki(?)-ṣa]r(?) šá EN.NUN ana IG1***

- 4'. [.] x *ir*(?) 1-*en a* x x [.] x 'me(?)¹ 13 *ki-ṣir šá*(?) 23 *ina* 18
 5'. [.] x KUR MEŠ x [. *k*] *i ki-ṣir šá* EN.NUN *ana* IGI *šá* 22 *ina* 36
 6'. [. *ana*(?)] 'IGI(?)¹-*šú* 1 KI DU [.] x ME(?) *é/ú lu mim-ma* NÍG.GIG *šá* EN x TAR-*ir*
 7'. [.] x *šar-ra* x TÙM(?) [.] *šá* [.]
 8'. [.] x *rí lu-ú ú-šá* x [.]
 9'. [.] x *ki-ṣu* x [.]
 10'. [.] x x [.]

Remarks

Although at present this text is completely obscure, there are some clues as to its general nature. The term *kiṣru* (*kiṣaru*) is used for the lunar node(?) in the lunar procedure text Neugebauer, *ACT* 1, 200 (pp. 191, 199) and in the lunar eclipse cycle text BM 36754 (see A. Aaboe, "Saros Cycle Dates and Related Babylonian Astronomical Texts," *Transactions of the American Philosophical Society* 81 [1991], p. 25). The alternation of the phrases *ki-ṣir ki ki-ṣir* and *ki-ṣir ki ki-ṣar* suggests that *ki-ṣar* here is to be interpreted as a variant writing of *ki-ṣir*. The writing *ki-ṣa-ri* for *kiṣri* is found elsewhere only in Neugebauer, *ACT* 1, 200 obv. col. i 20; following that passage one should note the possibility that *KI ki-ṣir/ki-ṣar* here is to be interpreted as *qaqqar kiṣri*. Comparison of the apparently repetitive nature of the present text with, e.g., Neugebauer *ACT* 1, 200 obv. col. i a 2–13 (p. 187) suggests the possibility that the present text deals with varying values for some aspect of the lunar node according to the moon's position in the zodiacal signs, but it must be admitted that the last four lines increasingly diverge from a standard pattern. The relevance of the "watch" (EN.NUN = *māṣṣartu*) to such a scheme is quite unclear; this term does not appear elsewhere in the Neugebauer *ACT* texts.

A different approach to the text might be suggested by the terms *me-he-e* (if the signs are so read), "storm," which has no place in a procedure text, and NÍG.GIG = *ikkibu*, "taboo," which belongs in a religious context. The varying numbers given in different lines of this text are not typical of astrological or other omen texts.

88.

MMA 86.11.411C

Unidentified Fragment

Plate 114

Later 1st millennium(?)

H. 30 mm W. 34 mm Th. 22 mm

Remarks

This small fragment is of quite uncertain content. At present there is no compelling reason to suggest that it is astronomical. However, from the circumstance that it has interlinear rulings, as does text No. 86, it is possible that it belongs to the same tablet.

PART FIVE
NOS. 89–106
UNIDENTIFIED FRAGMENTS

Nos. 89–94

Unidentified Fragments in Akkadian

W. G. Lambert

89.

MMA 86.11.418

Plate 114

H. 48 mm W. 45 mm Th. 23 mm

Unidentified Fragment

Later 1st millennium

Obverse

1. 'é'-me(?)-gan-na a a x [. . .]
2. šá giš^mdalāti^m x x [. . .]
3. 2 bīt pa-pa-{U}-h[a . . .]
4. 1 gú(?) [n]i(?) x [. . .]
5. 2 x x x [. . .]
6. [. . .] x aš e [. . .]
7. 2 ká é-zig-g[ur-rat . . .]
8. 2 ká pa-tar [. . .]
9. 2 ká é-D[U(?) . . .]

Lower Edge

10. 3 x [. . .]
11. (traces)

Reverse

(traces)

Remarks

This is the left-hand portion of a small tablet with nine lines of writing preserved on the obverse, traces of two additional lines on the lower edge, and more illegible traces on the reverse. It is of uncertain content. It alludes to parts of buildings, including parts of temples, but it does not read like a regular topographical text. The “2” in front of the word “gate” in ll. 7–9 cannot mean “two gates” unless there is an irregularity in the script. It could also be the sign indicating a repetition of something in earlier lines.

90.

MMA 86.11.370B
Plate 114
H. 32 mm W. 24 mm Th. 18 mm

Unidentified Fragment
Later 1st millennium(?)

91.

MMA 86.11.473
Plate 114
H. 38 mm W. 34 mm Th. 24 mm

Unidentified Fragment
Later 1st millennium(?)

92.

MMA 86.11.471
Plate 115
H. 34 mm W. 33 mm Th. 21 mm

Unidentified Fragment
Later 1st millennium(?)

93.

MMA 86.11.462
Plate 115
H. 40 mm W. 34 mm Th. 15 mm

Unidentified Fragment
Later 1st millennium

94.

MMA 86.11.383I
Plate 115
H. 25 mm W. 15 mm Th. 11 mm

Unidentified Fragment
Later 1st millennium

Remarks (text Nos. 90–94)

The few signs that remain on these fragments indicate that the texts are written in Akkadian and their content is literary, but so far they offer nothing to indicate their precise category.

Nos. 95–97

Bilingual (Sumerian–Akkadian) Fragments

W. G. Lambert

95.

MMA 86.11.444

Plate 115

H. 40 mm W. 38 mm Th. 24 mm

Bilingual Unidentified Fragment

Later 1st millennium

Obverse

1'–10'. (see Remarks below)

Reverse

1'–3'. (too fragmentary for transliteration)

4'. dA -nun-na dingir-gal-g[al(!)-e-ne . . .

5'. dMIN $ilānu^{meš}$ $rabûtu^{mleš}$. . .

6'–10'. (too fragmentary for transliteration)

Translation

Reverse

4'–5'. The Anunna, the great gods [. . .

Remarks

This is a fragment of religious or literary content. The side provisionally taken as the reverse is written in couplets, and one is clearly bilingual. However, in part due to the poor preservation, it is not clear that the other lines on the reverse or obverse are also bilingual, although this would be expected. dKu -še-e-a in obv. l. 4 may well be the goddess elsewhere written Gušeya, Gušaya, and Agušaya (E. Ebeling, “Agušaja,” *RLA* 1 [(1928], p. 43; K. Tallqvist, *Akkadische Götterepitheta, mit einem Götterverzeichnis und einer Liste der prädikativen Elemente der sumerischen Götternamen*, StOr 7 [Helsinki, 1938], p. 318). The deity dA -nu-nu in obv. l. 6 is presumably the same as dA -nu-na in PBS I/1 no. 2 (W. G. Lambert, ed., “A Babylonian Prayer to Anuna,” in H. Behrens, D. Loding, and M. T. Roth, eds., *Dumu-e₂-dub-ba-a, Studies in Honor of Åke W. Sjöberg*, Occasional Publications of the Samuel Noah Kramer Fund 11 (Philadelphia, 1989), pp. 321–36. In favor of these identifications is the fact that Gušeya and Anuna are forms of Ištar. Also it is not possible to make a bilingual out of obv. ll. 6–7 (dA -nu = dA -nu), since this god in Sumerian is An. Probably then, this is some kind of text in honor of Ištar.

96.

MMA 86.11.373B

Plate 116

H. 35 mm W. 30 mm Th. 17 mm

Bilingual Unidentified Fragment

Later 1st millennium(?)

Remarks

This fragment preserves the remains of two columns with a bilingual literary text mentioning Sippar.

97.

MMA 86.11.506

Plate 116

H. 30 mm W. 14 mm Th. 12 mm

Bilingual(?) Unidentified Fragment

Later 1st millennium(?)

Remarks

This is a literary fragment, perhaps bilingual.

Nos. 98–106

Miscellaneous Fragments

W. G. Lambert

98.

MMA 86.11.448 + 86.11.512
Plate 116
H. 48 mm W. 39 mm Th. 24 mm

Fragment of a Text Containing Incantations
Later 1st millennium(?)

99.

MMA 86.11.541
Plate 116
H. 31 mm W. 31 mm Th. 18 mm

Fragment of an Exercise Tablet
Later 1st millennium(?)

100.

MMA 86.11.489
Plate 117
H. 30 mm W. 45 mm Th. 10 mm

Fragment, Content Uncertain
Later 1st millennium(?)

Remarks

Read perhaps in l. 2': *an-na-na* A [an¹-na-¹na¹], “so-and-so, son of so-and-so.”

101.

MMA 86.11.493
Plate 117
H. 22 mm W. 37 mm Th. 14 mm

Fragment, Content Uncertain
Later 1st millennium(?)

102.

MMA 86.11.432
Plate 117
H. 36 mm W. 56 mm Th. 22 mm

Fragment, Content Uncertain
Later 1st millennium(?)

103.

MMA 86.11.552
Plate 118
H. 23 mm W. 16 mm Th. 7 mm

Fragment, Content Uncertain
Later 1st millennium

104.

MMA 86.11.509
Plate 118
H. 31 mm W. 32 mm Th. 7 mm

Fragment, Content Uncertain
Later 1st millennium

105.

MMA 86.11.521
Plate 118
H. 11 mm W. 18 mm Th. 5 mm

Fragment, Content Uncertain
Later 1st millennium

106.

MMA 86.11.548
Plate 118
H. 30 mm W. 15 mm Th. 6 mm

Fragment, Content Uncertain
Later 1st millennium

PLATES 1-118

DRAWINGS

All drawings are reproduced at a scale of 3:2 unless otherwise indicated

Text 1 Obverse

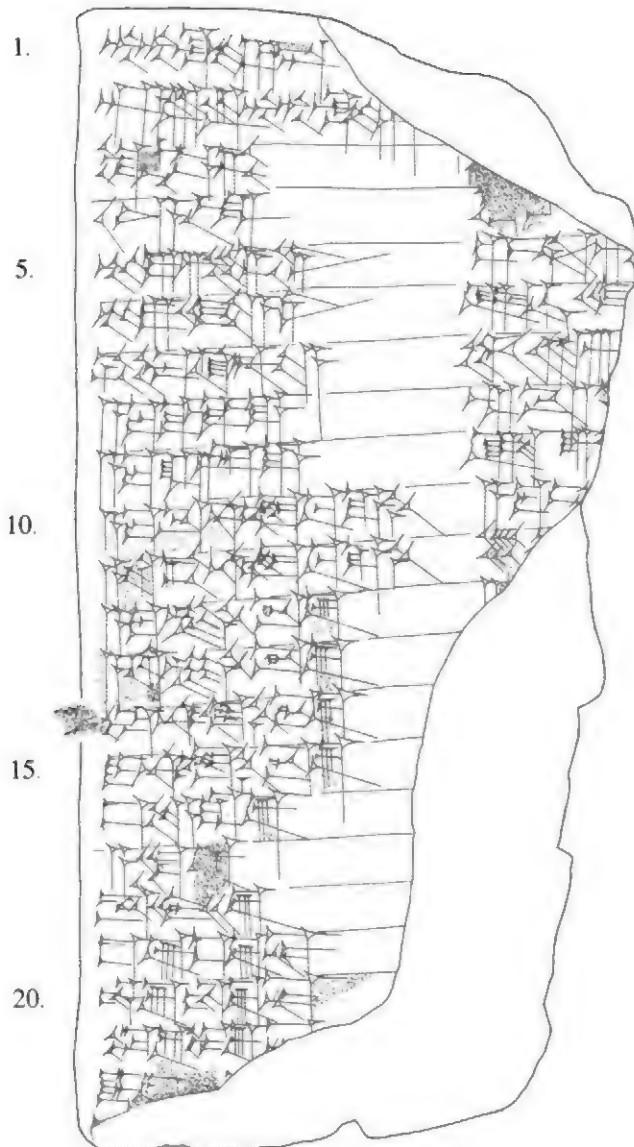
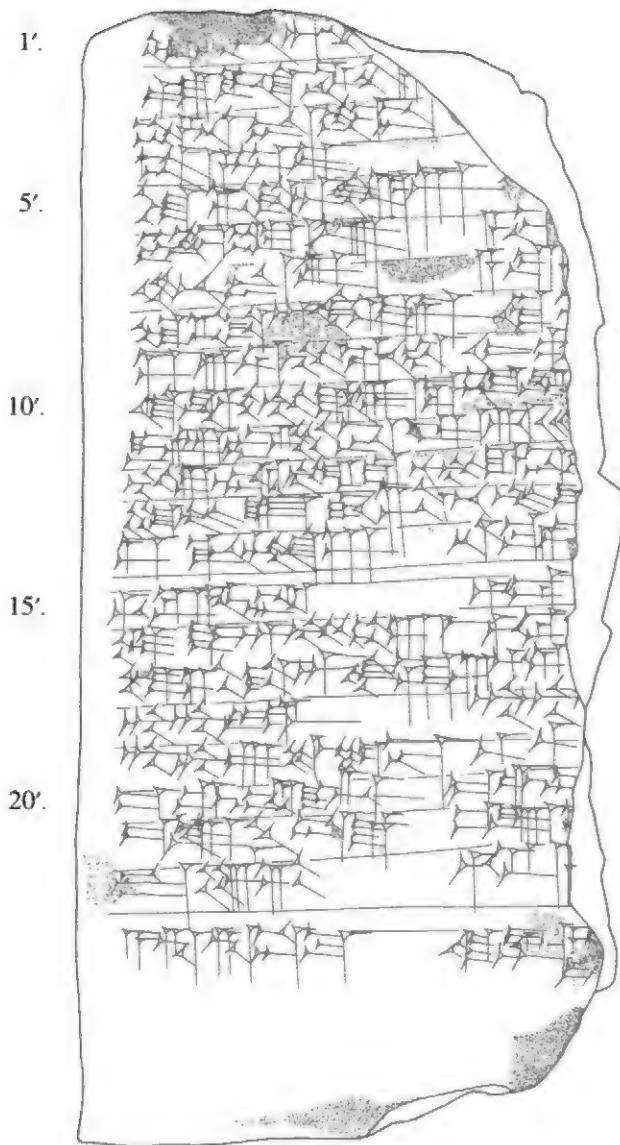


Plate 2

Text 1 Reverse



Text 2 Obverse

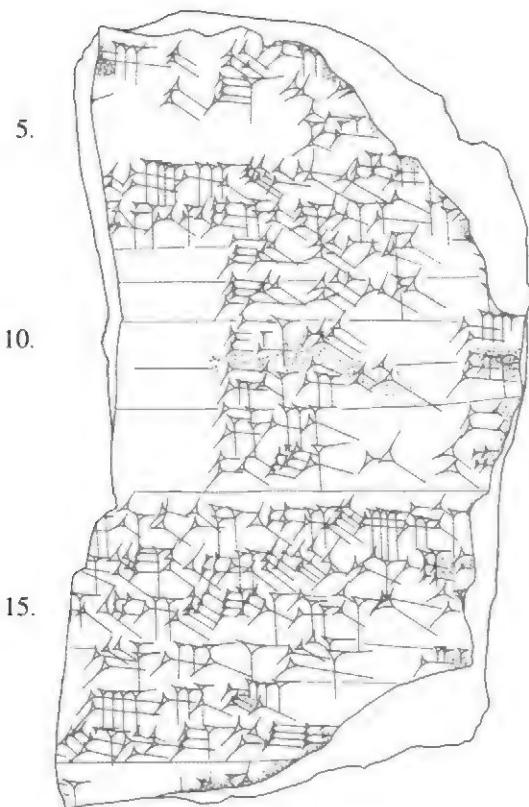
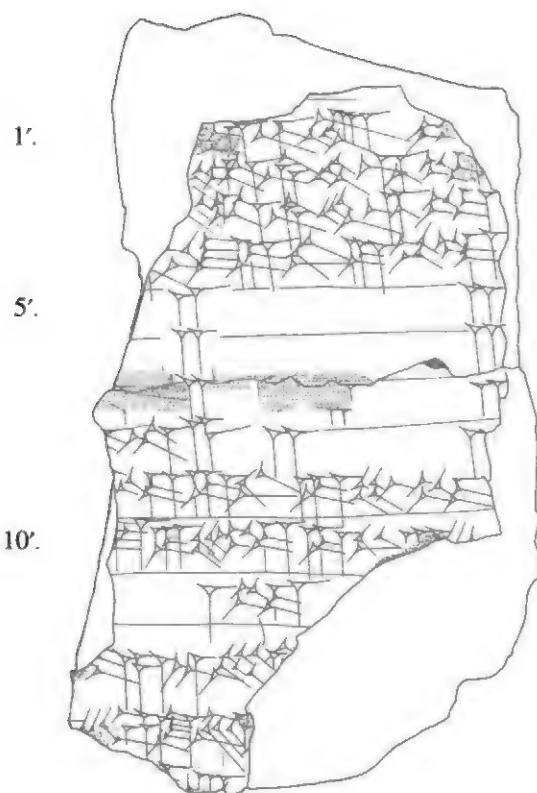


Plate 4

Text 2 Reverse



Text 3 Obverse

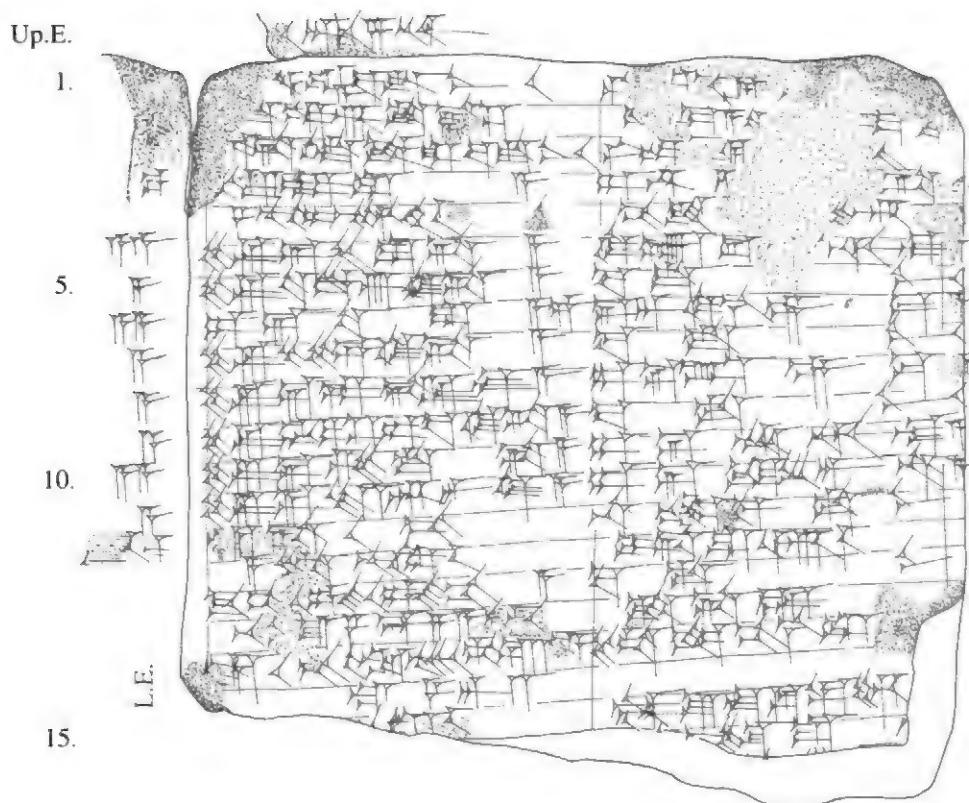
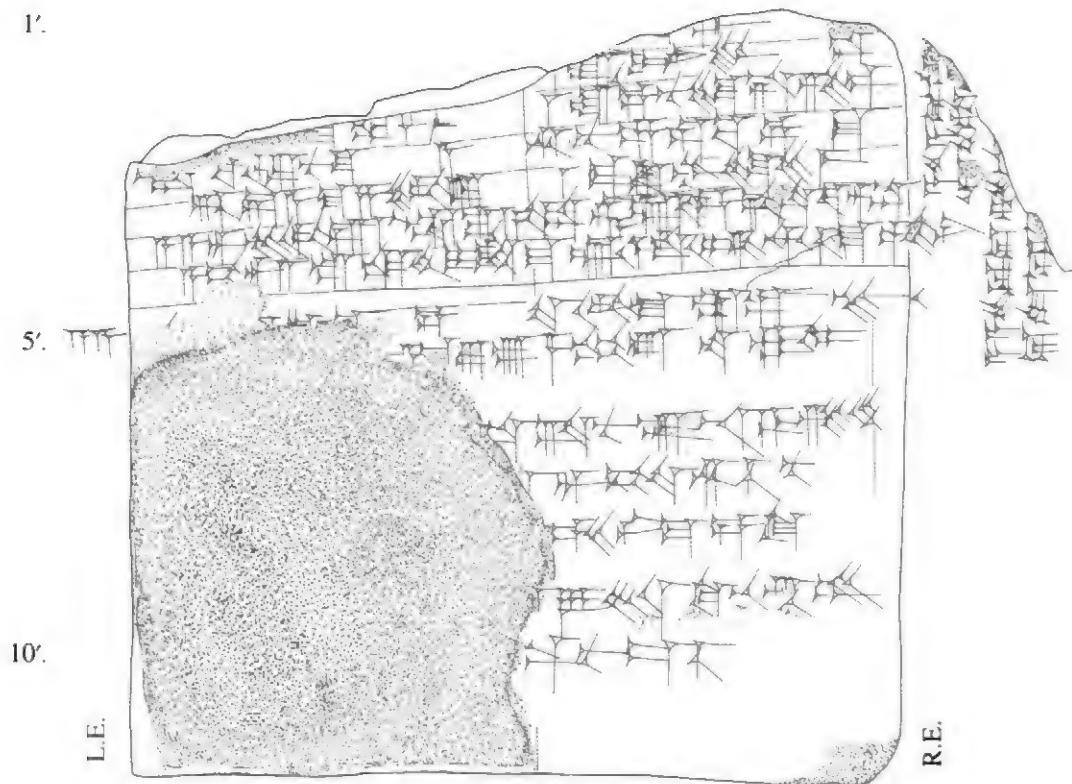


Plate 6

Text 3 Reverse



Text 4 Obverse

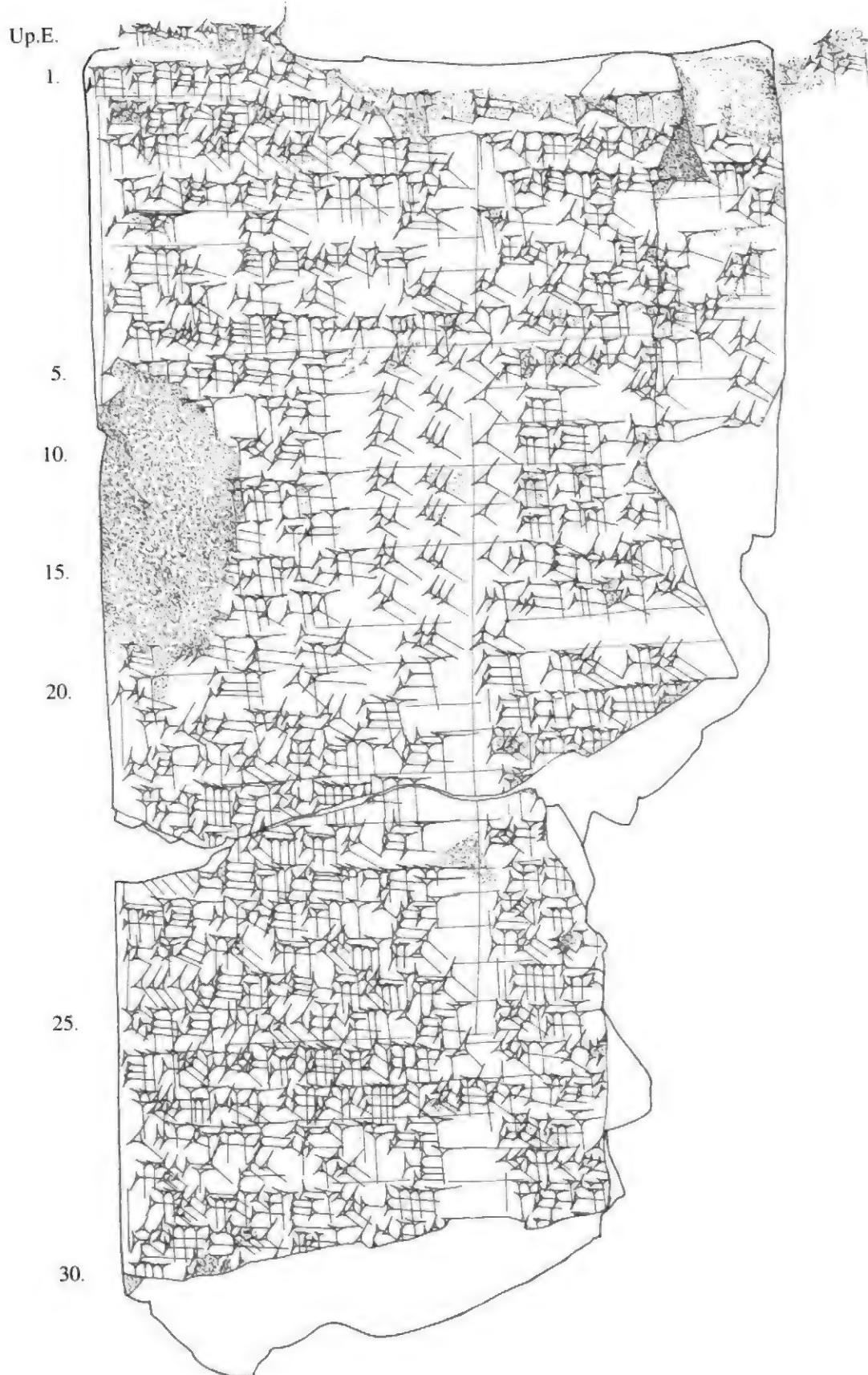
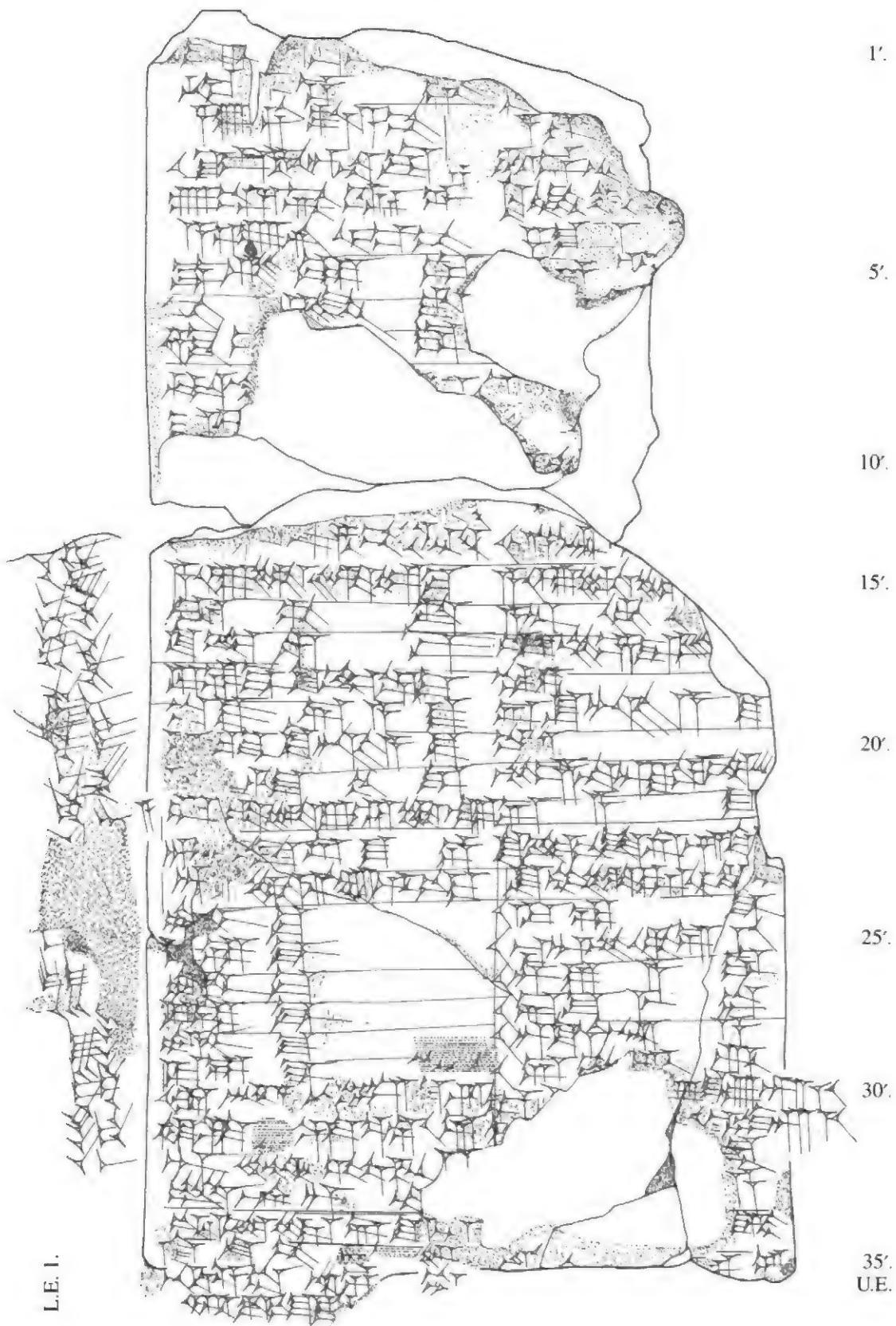


Plate 8

Text 4 Reverse

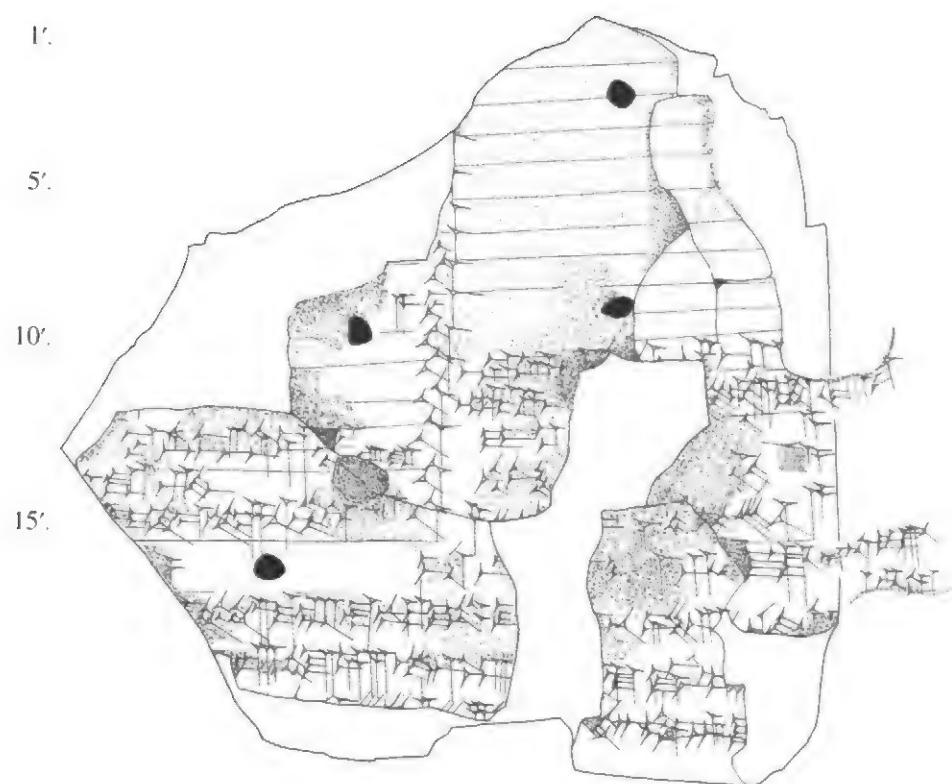


Text 5 Obverse

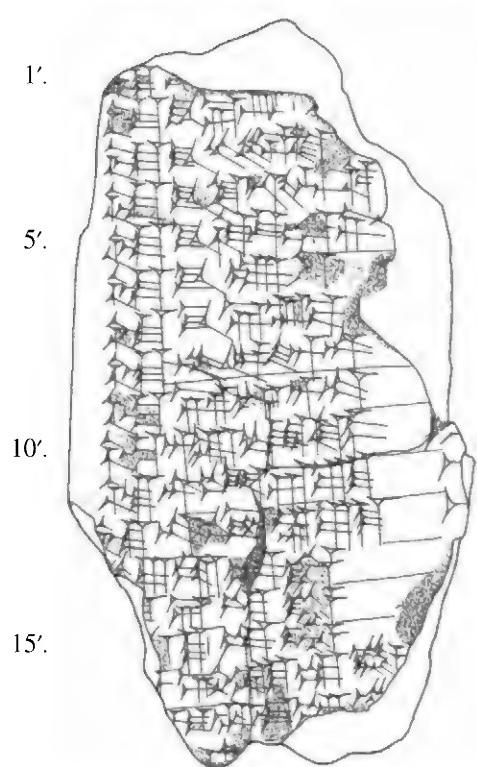


Plate 10

Text 5 Reverse



Text 6 Obverse



Text 6 Reverse

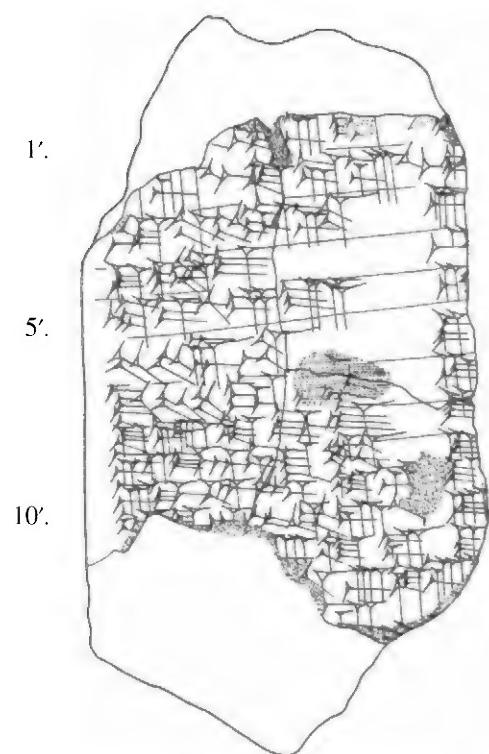
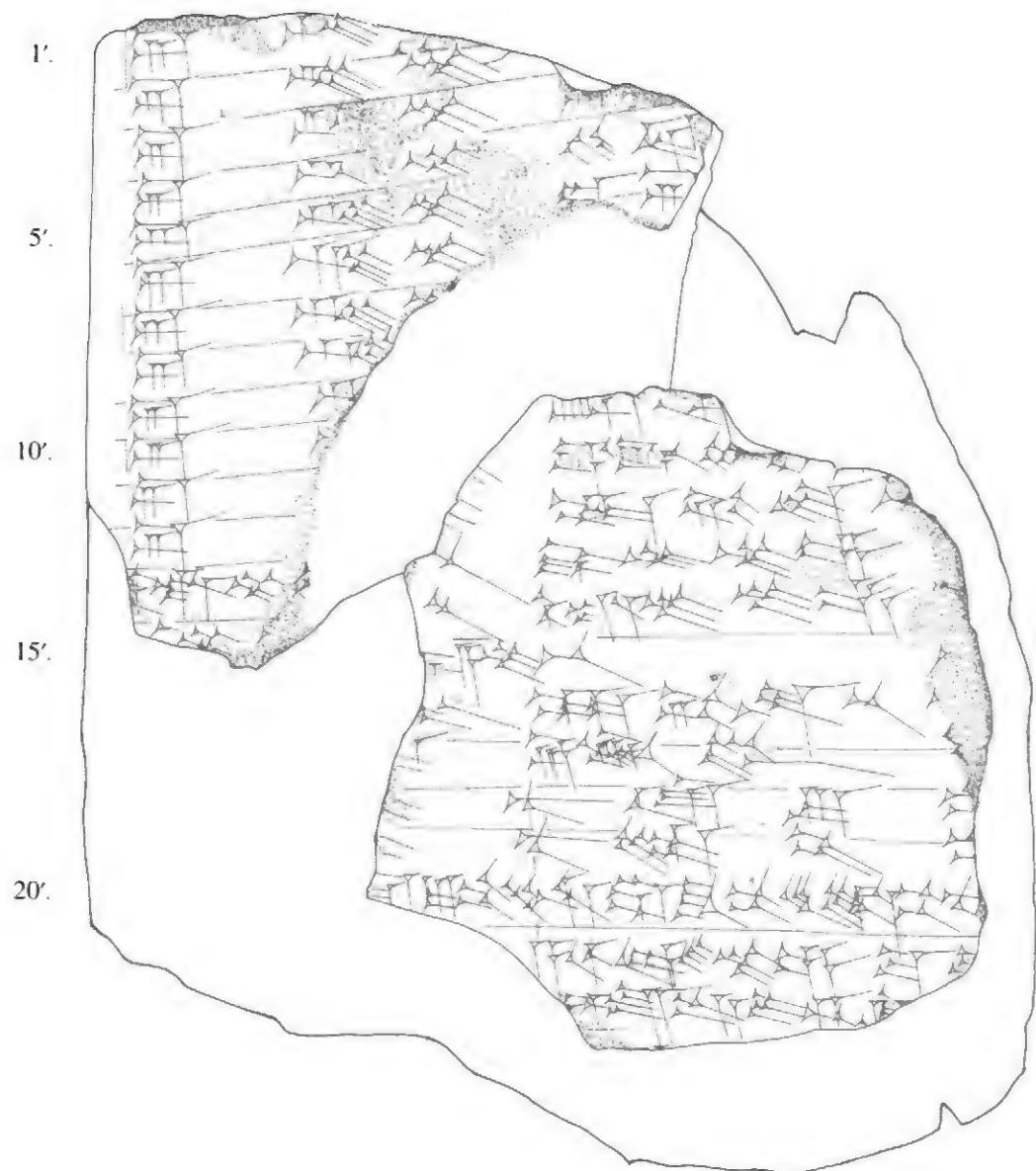


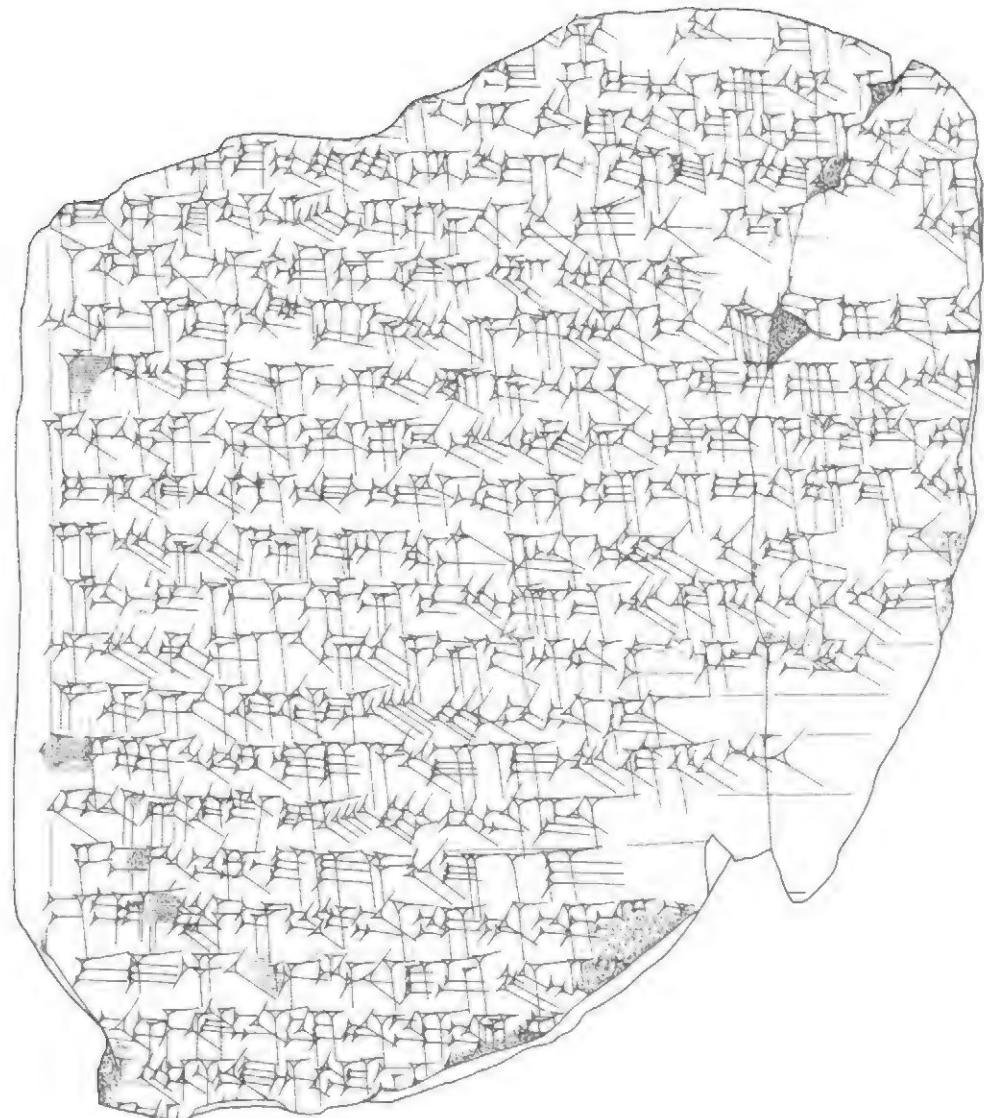
Plate 12

Text 7 Obverse



Text 7 Reverse

1.

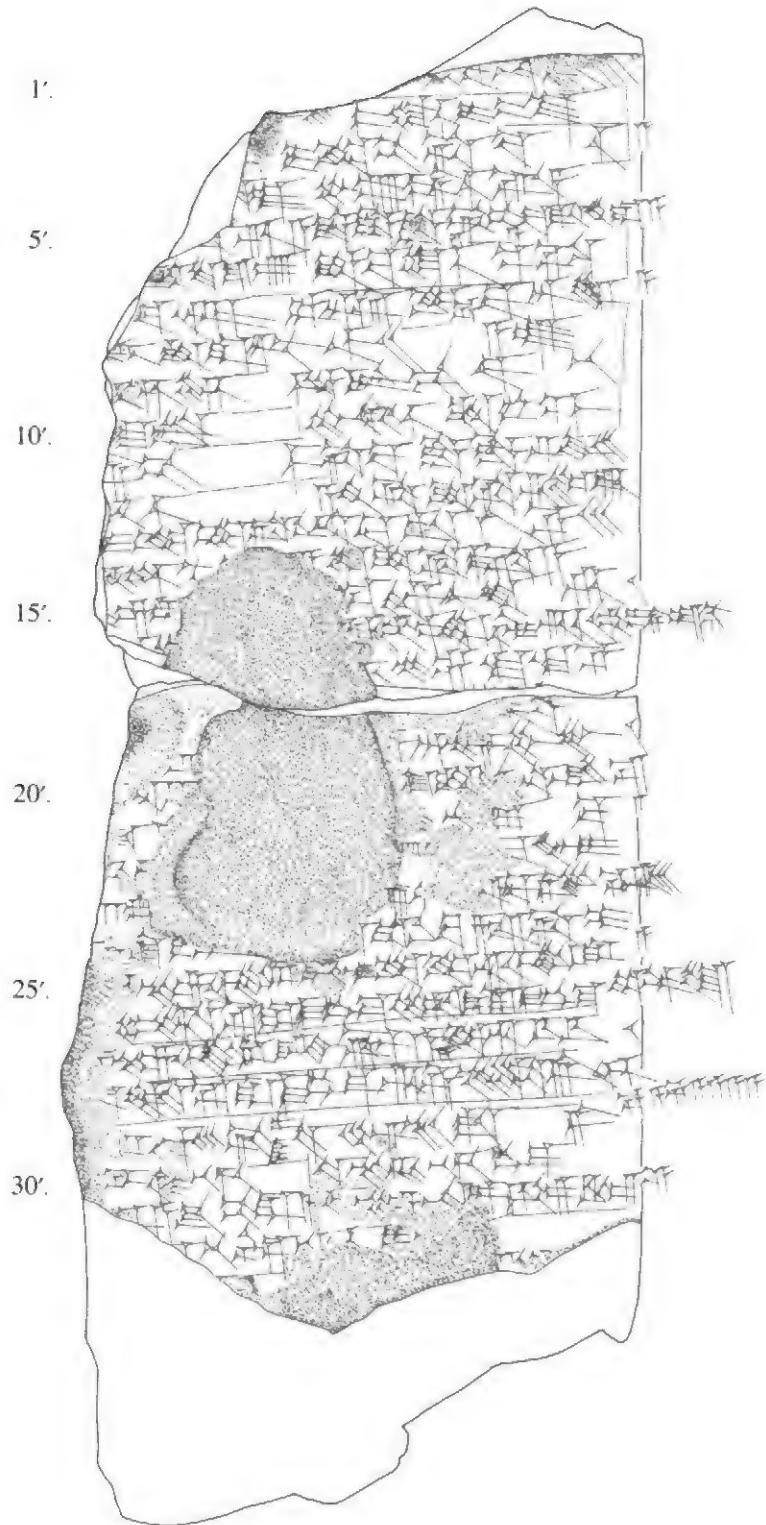


5.

10.

Plate 14

Text 8 Obverse



Text 8 Reverse

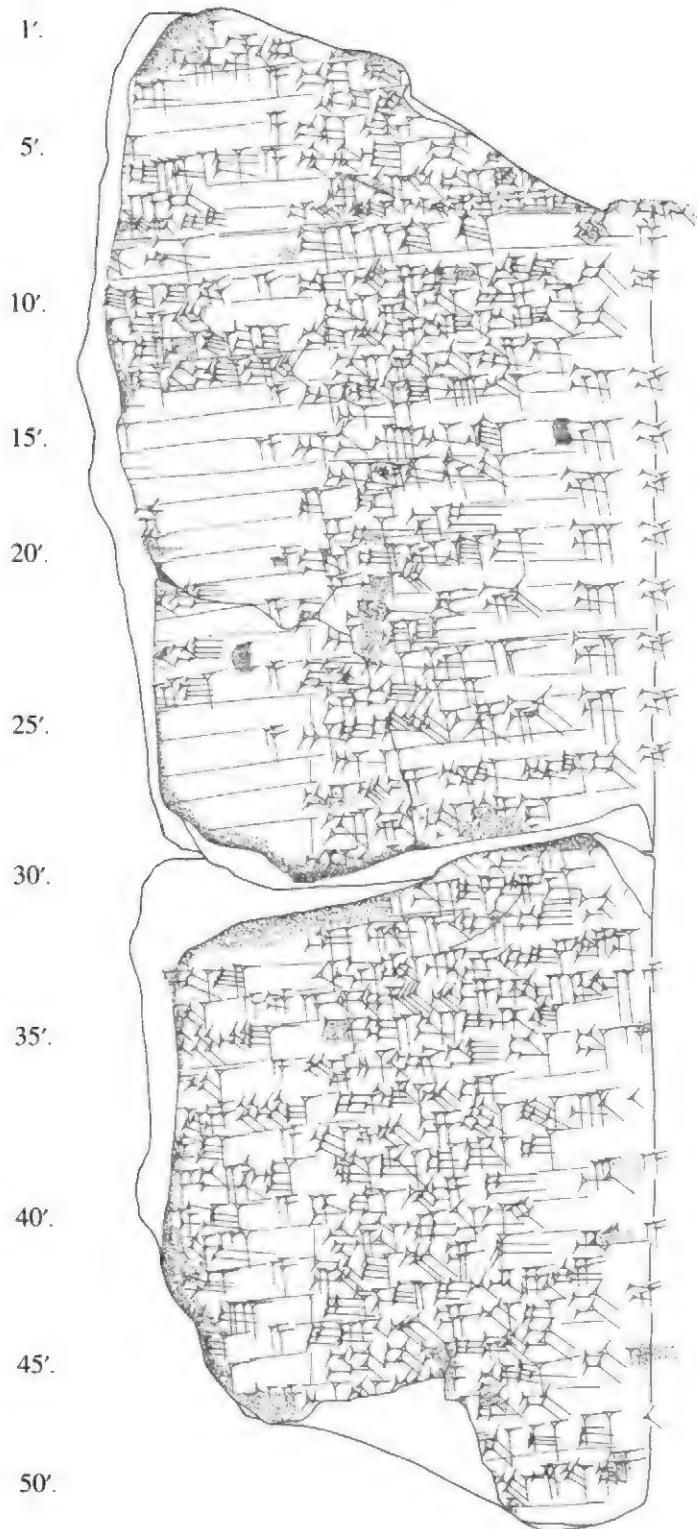
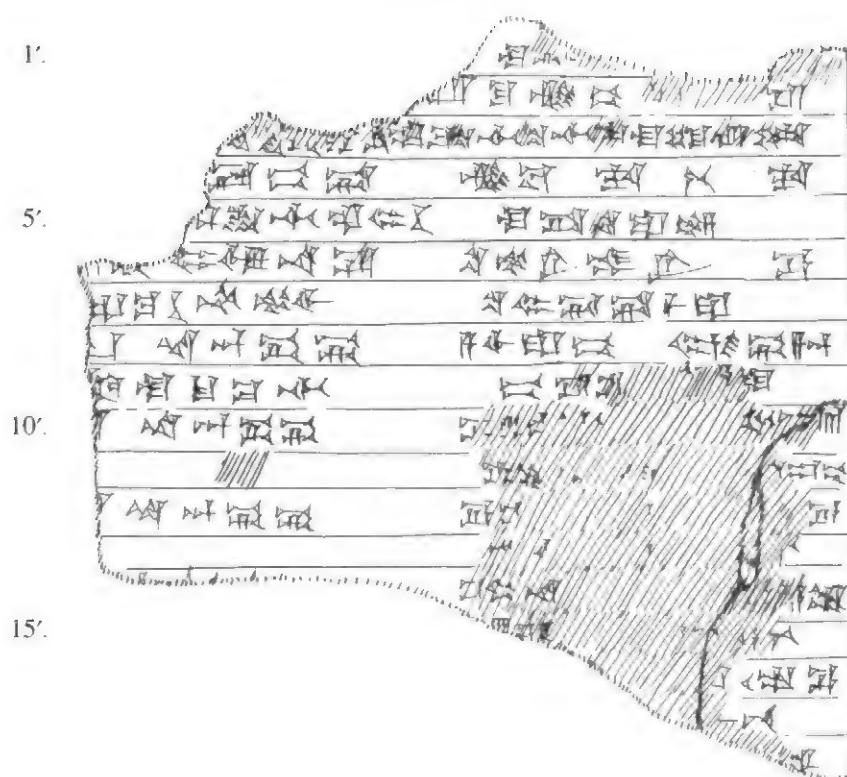


Plate 16

Text 9 Obverse



Text 9 Reverse

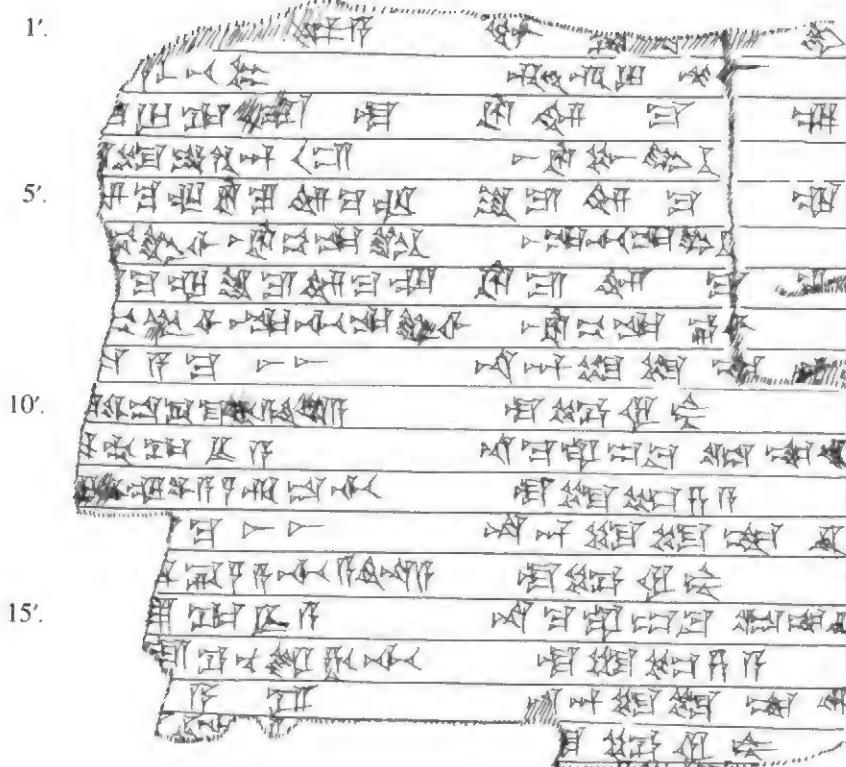


Plate 18

Text 10 Obverse



Text 10 Reverse

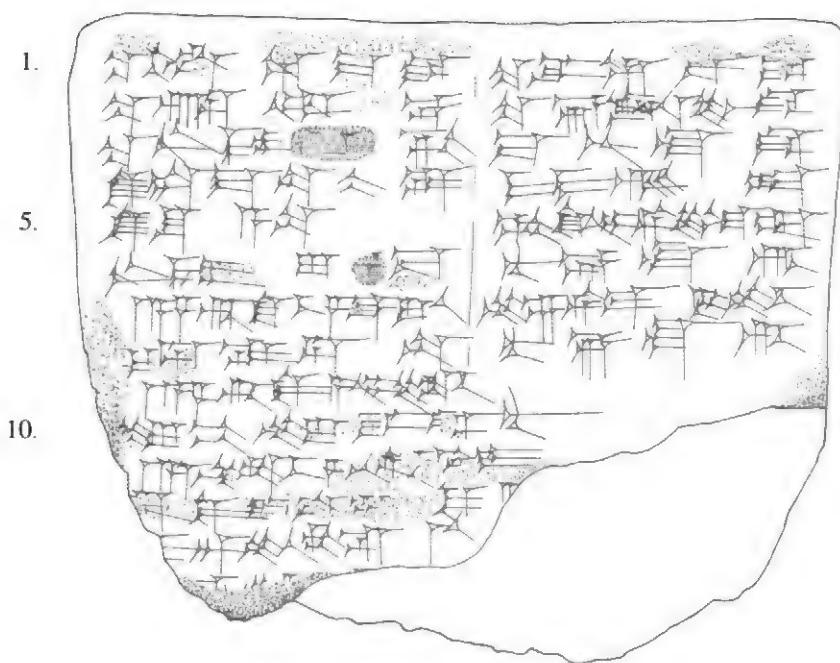
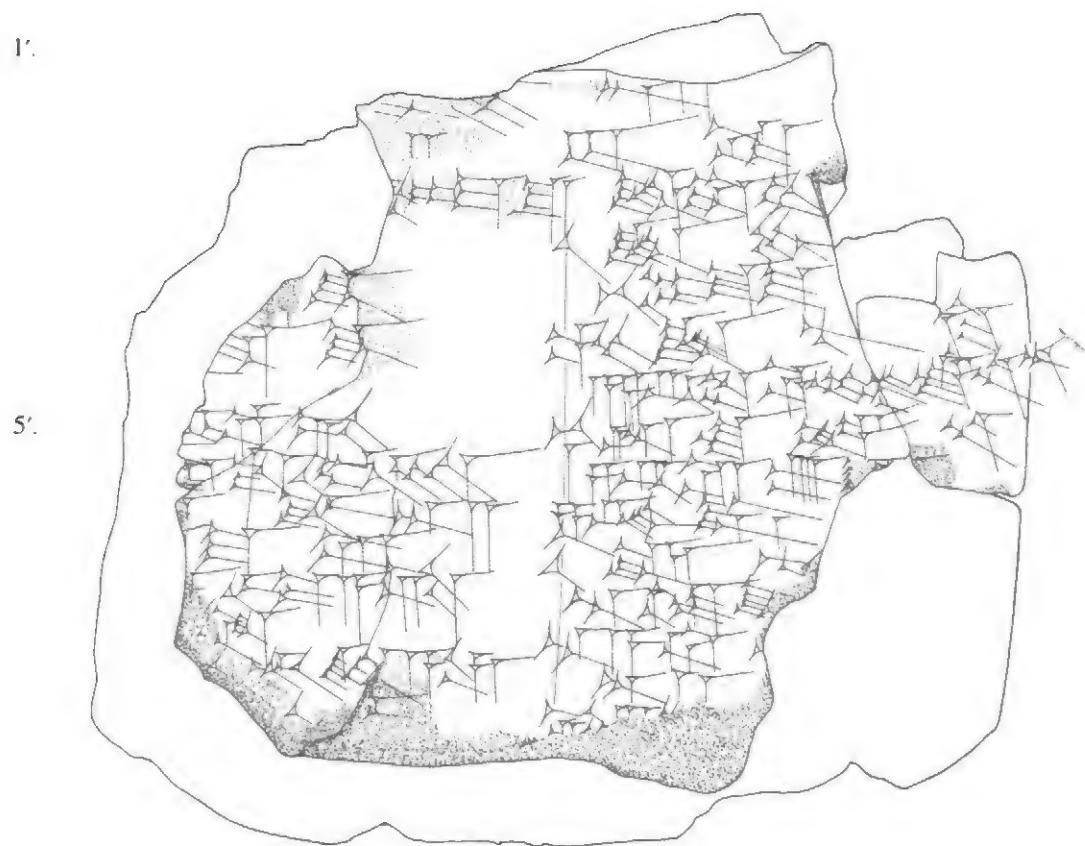


Plate 20

Text 11 Obverse



Text 11 Reverse

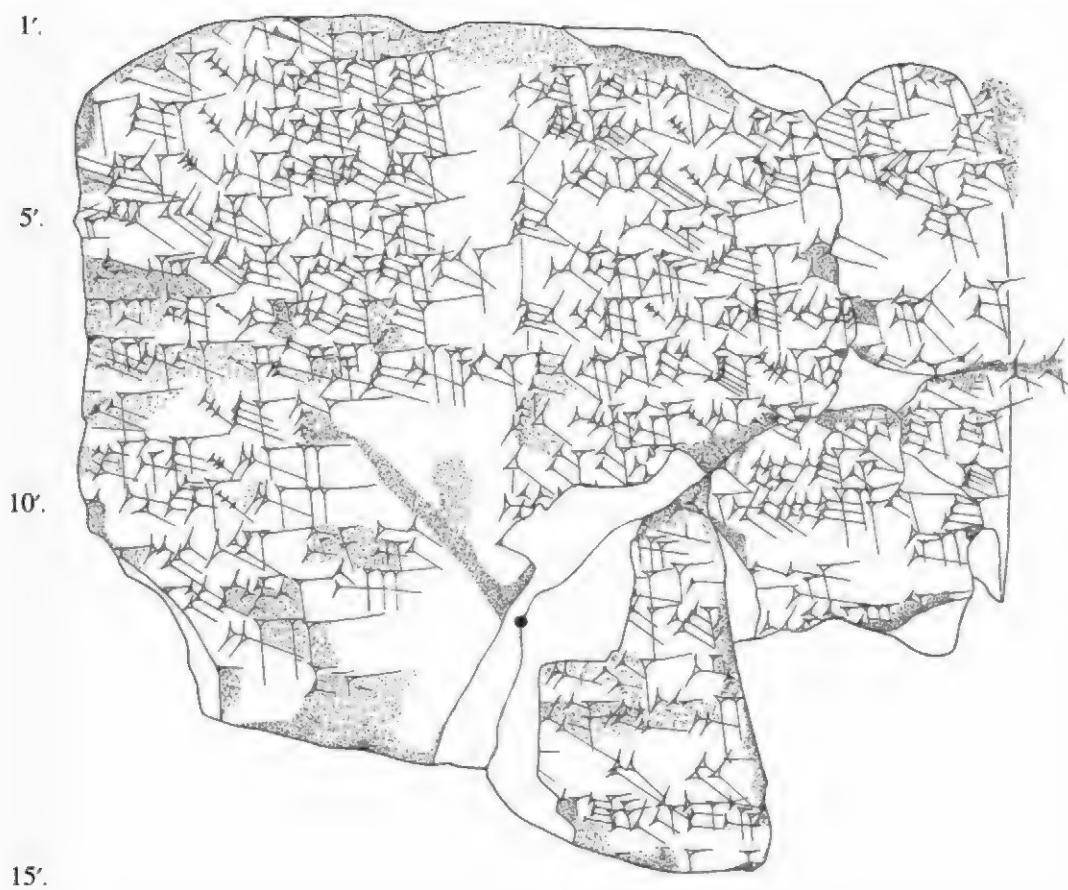
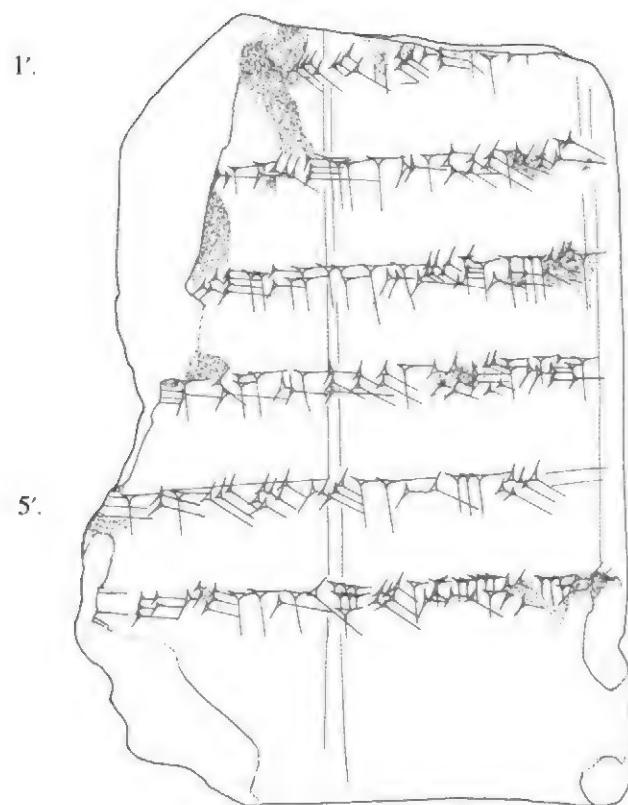


Plate 22

Text 12 Reverse



Text 13 Obverse

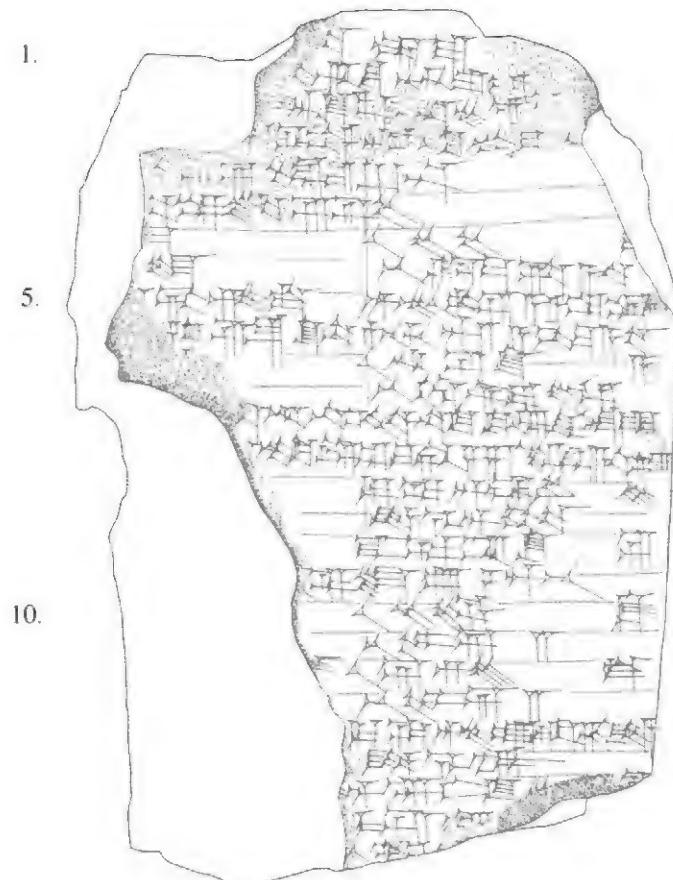
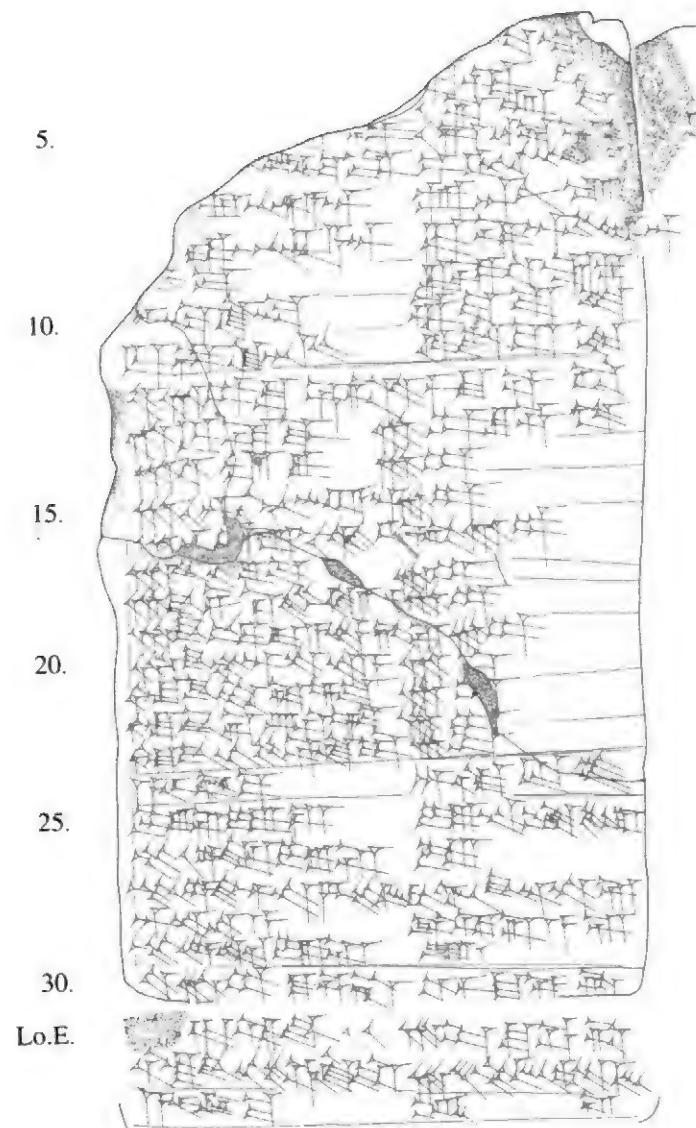


Plate 24

Text 14 Obverse



Text 14 Reverse

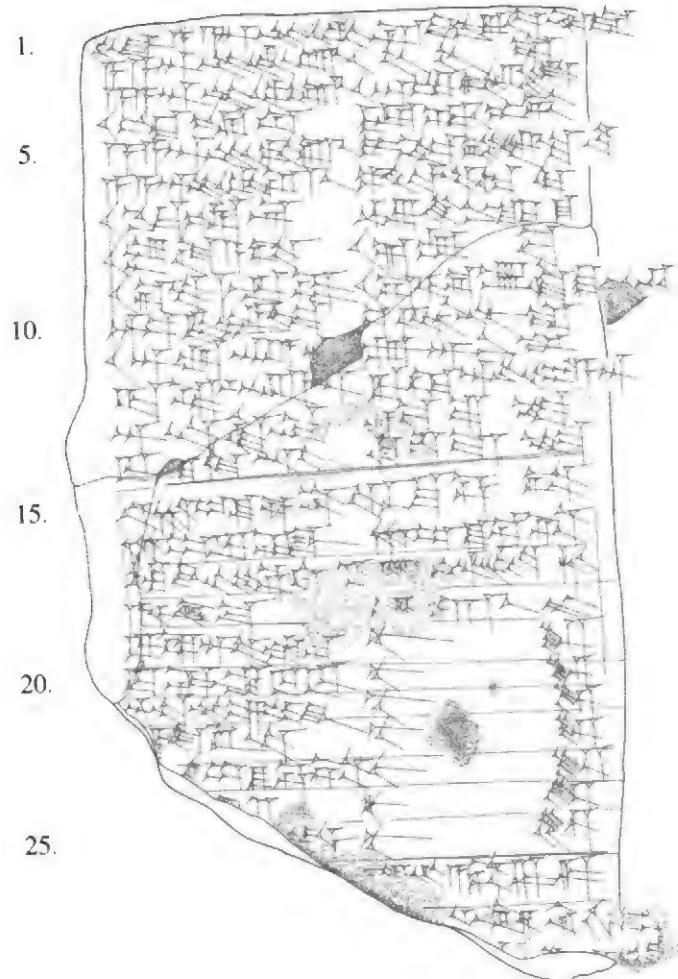


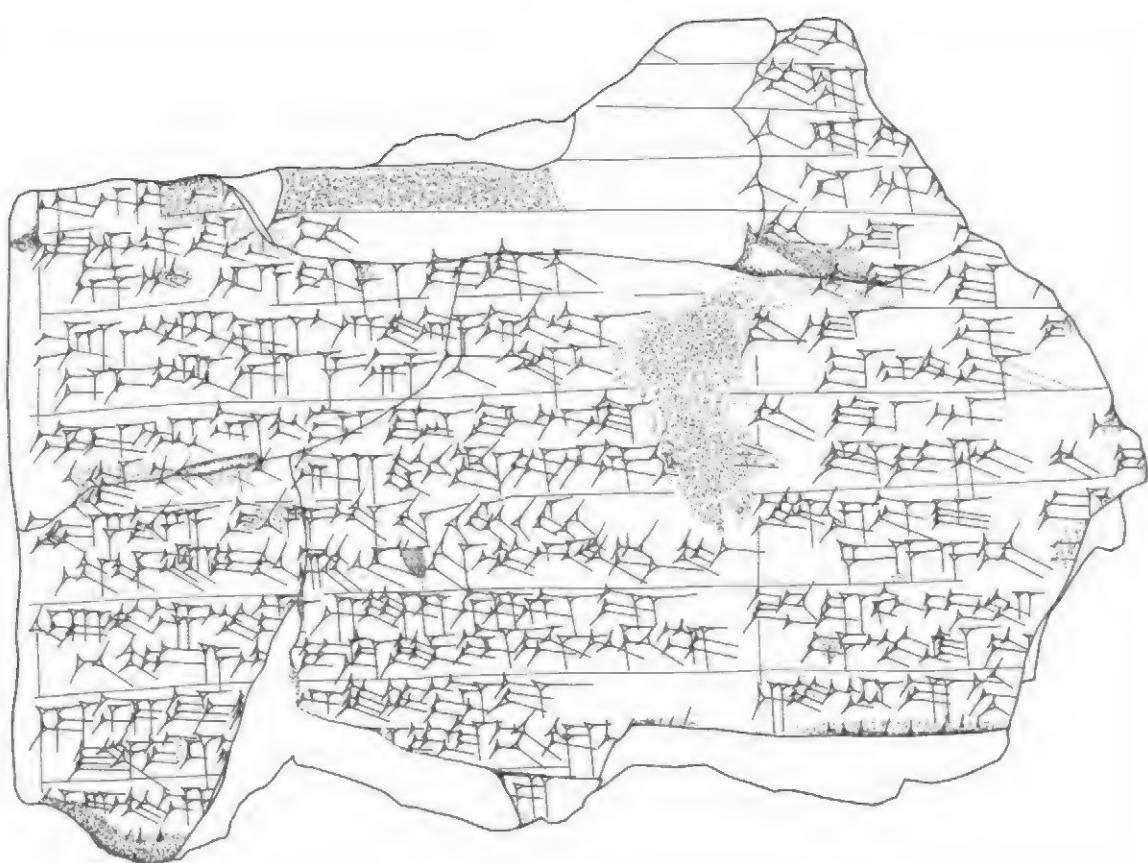
Plate 26

Text 15 Obverse

1.

5.

10.



Text 15 Reverse

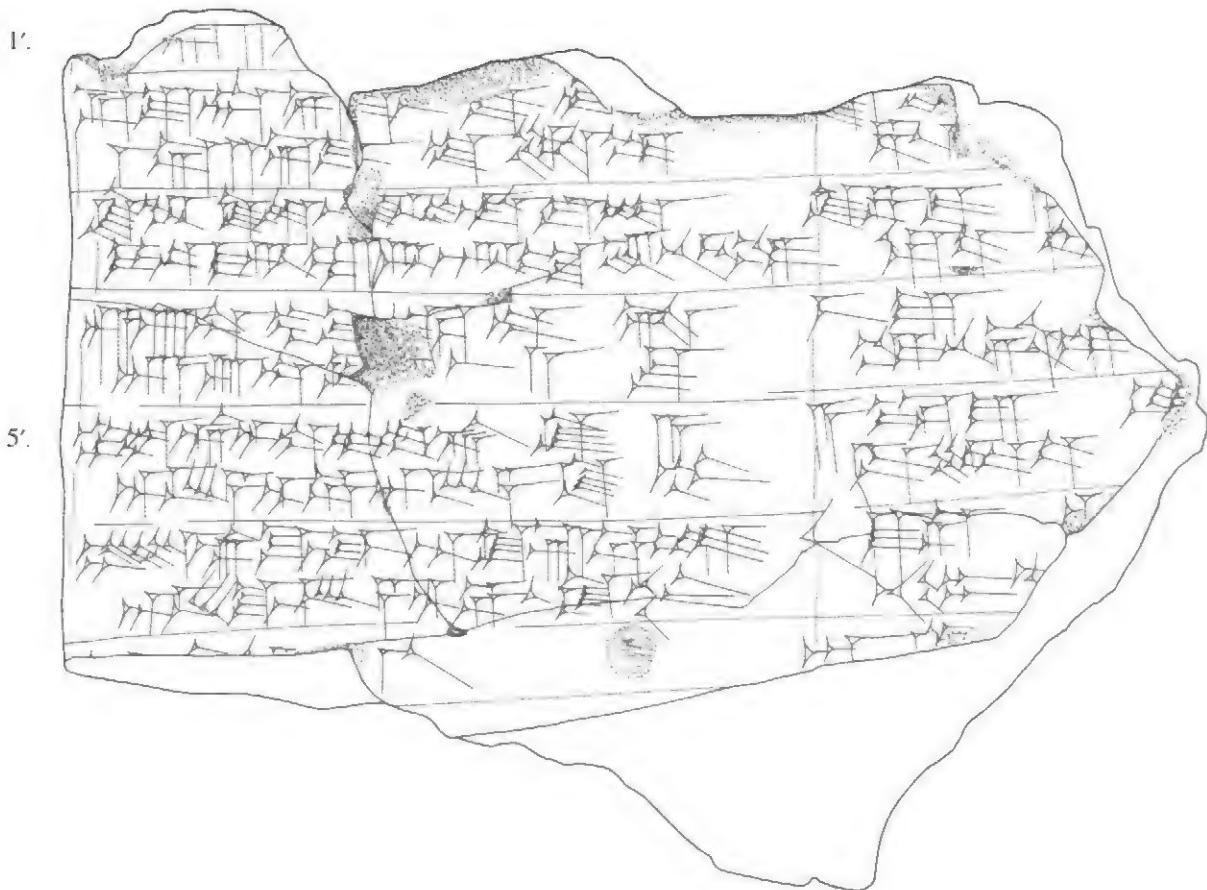


Plate 28

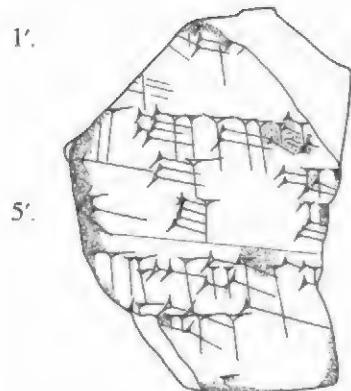
Text 16 Obverse



Text 16 Reverse



Text 17 Obverse



Text 17 Reverse

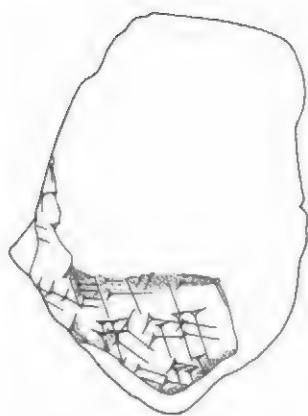


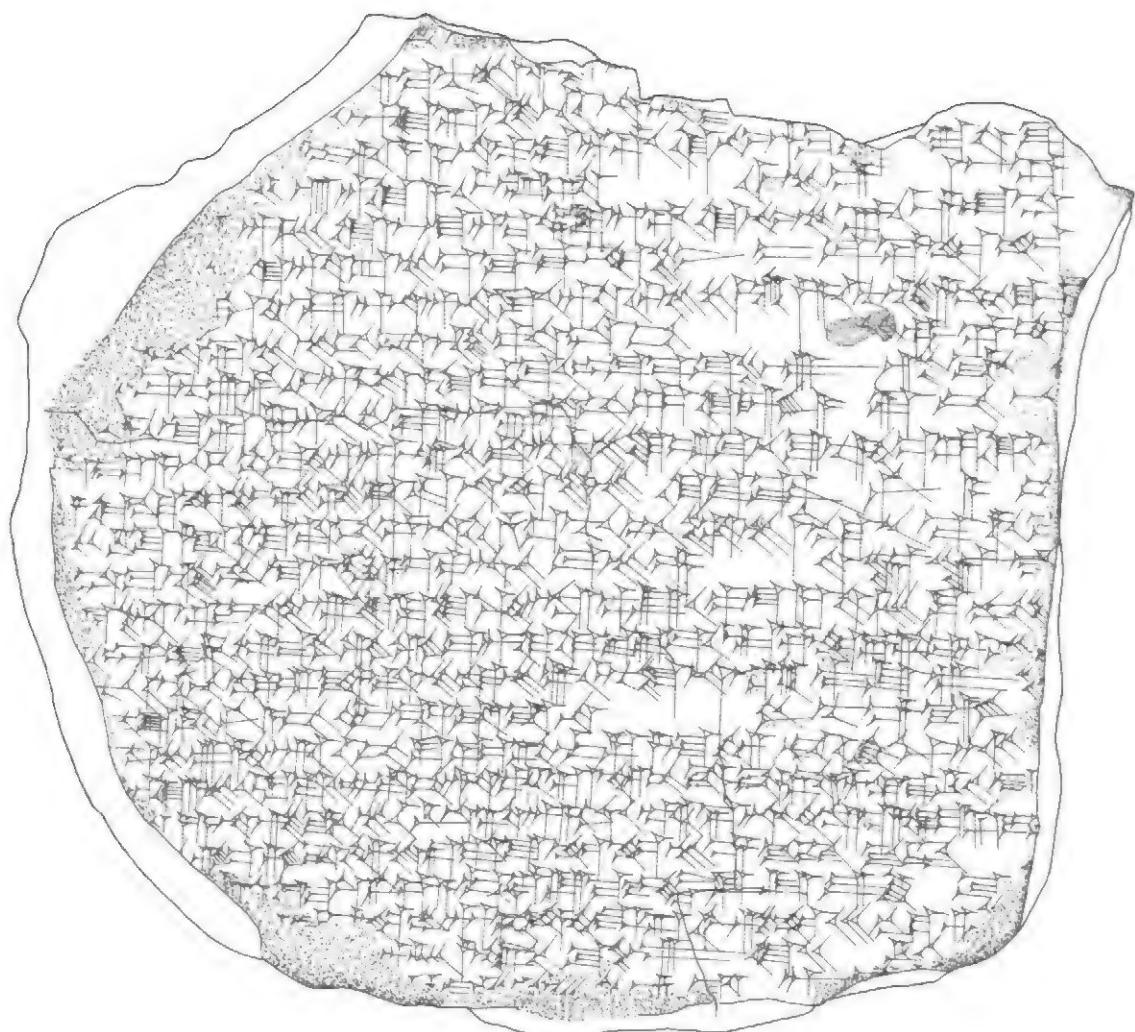
Plate 30

Text 18 Obverse

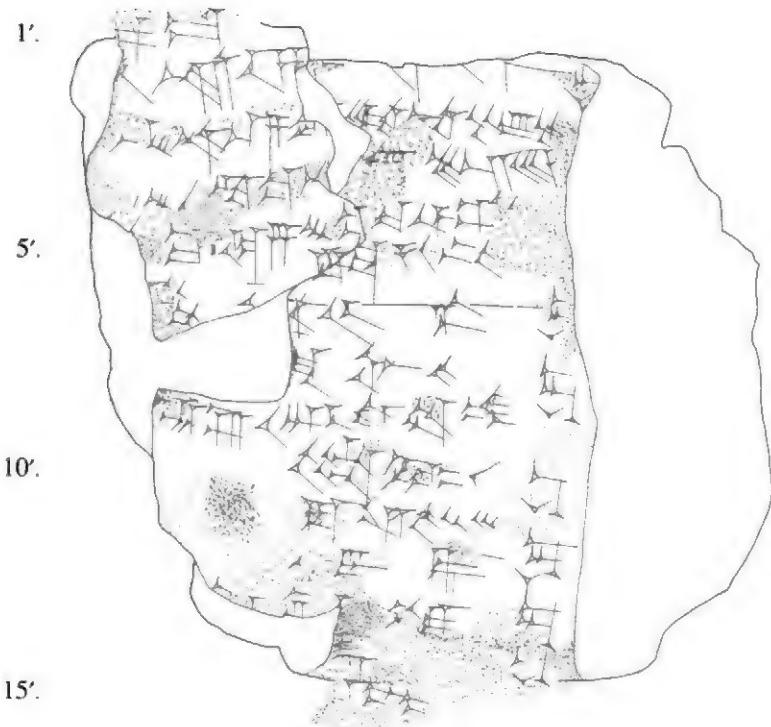
1'.

5'.

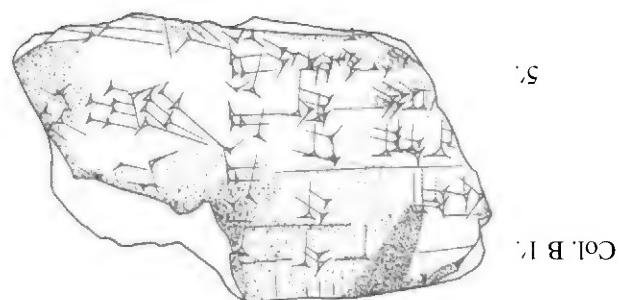
10'.



Text 19



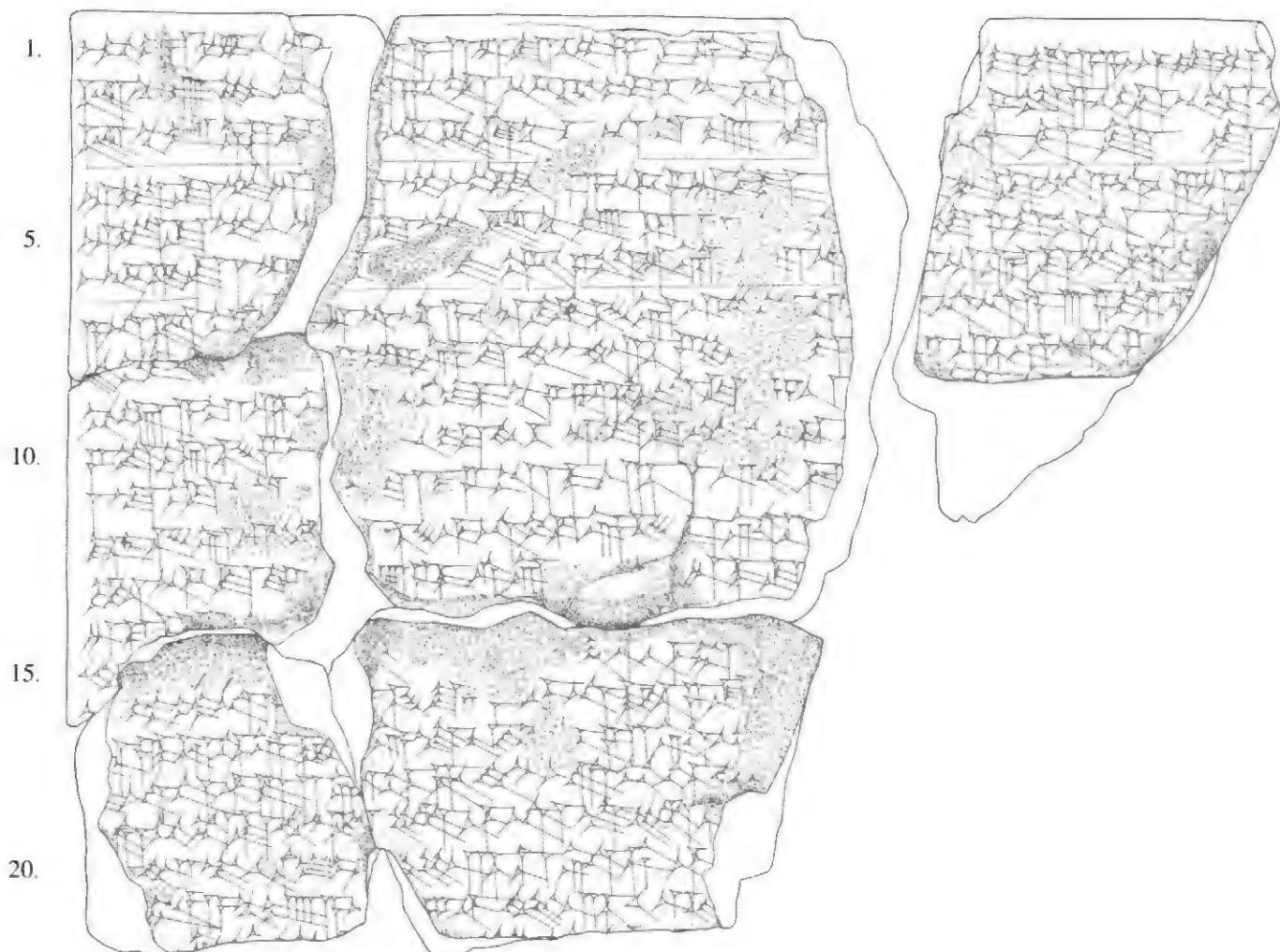
Col. A 1'.



Col. B 1'.

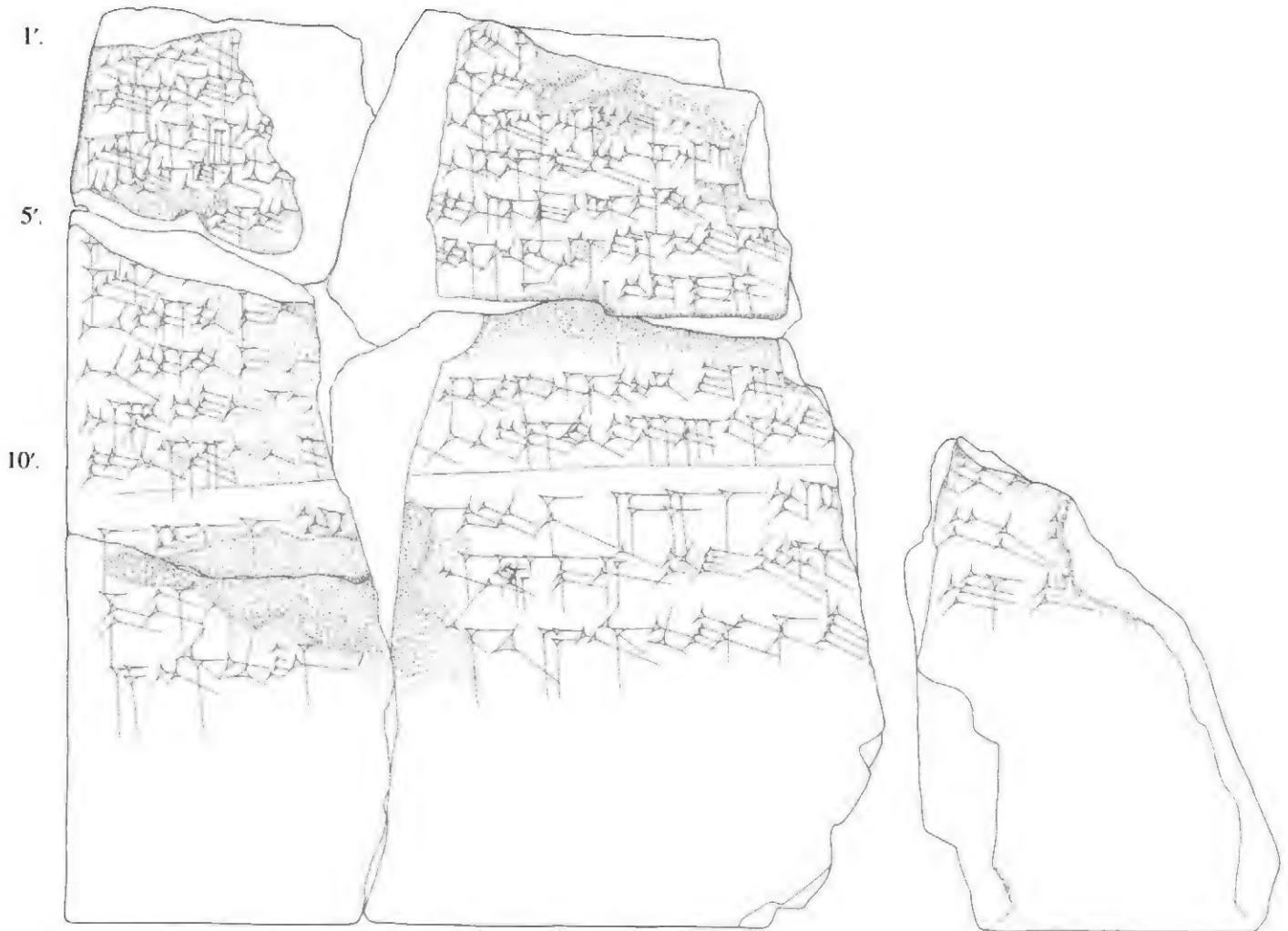
Plate 32

Text 20 Obverse



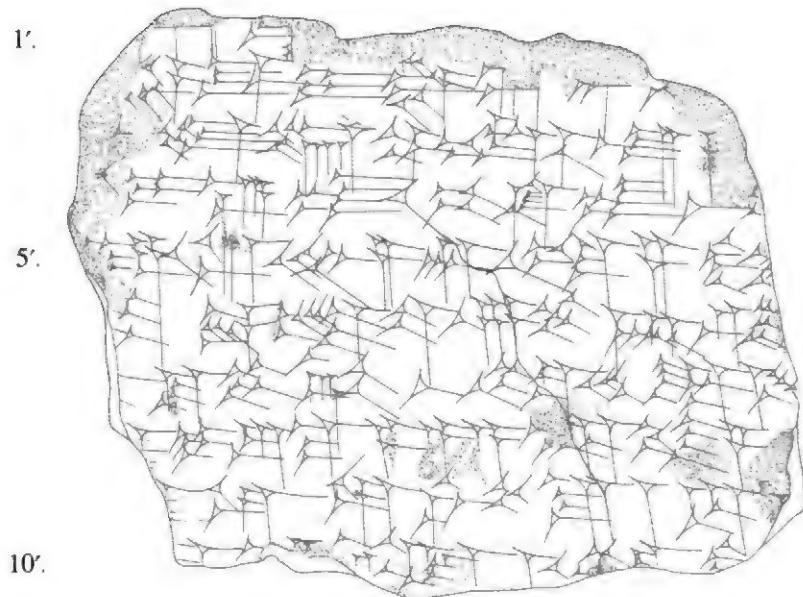
Scale: 85% of 3:2

Text 20 Reverse



Scale: 85% of 3:2

Text 21



Text 22 Obverse

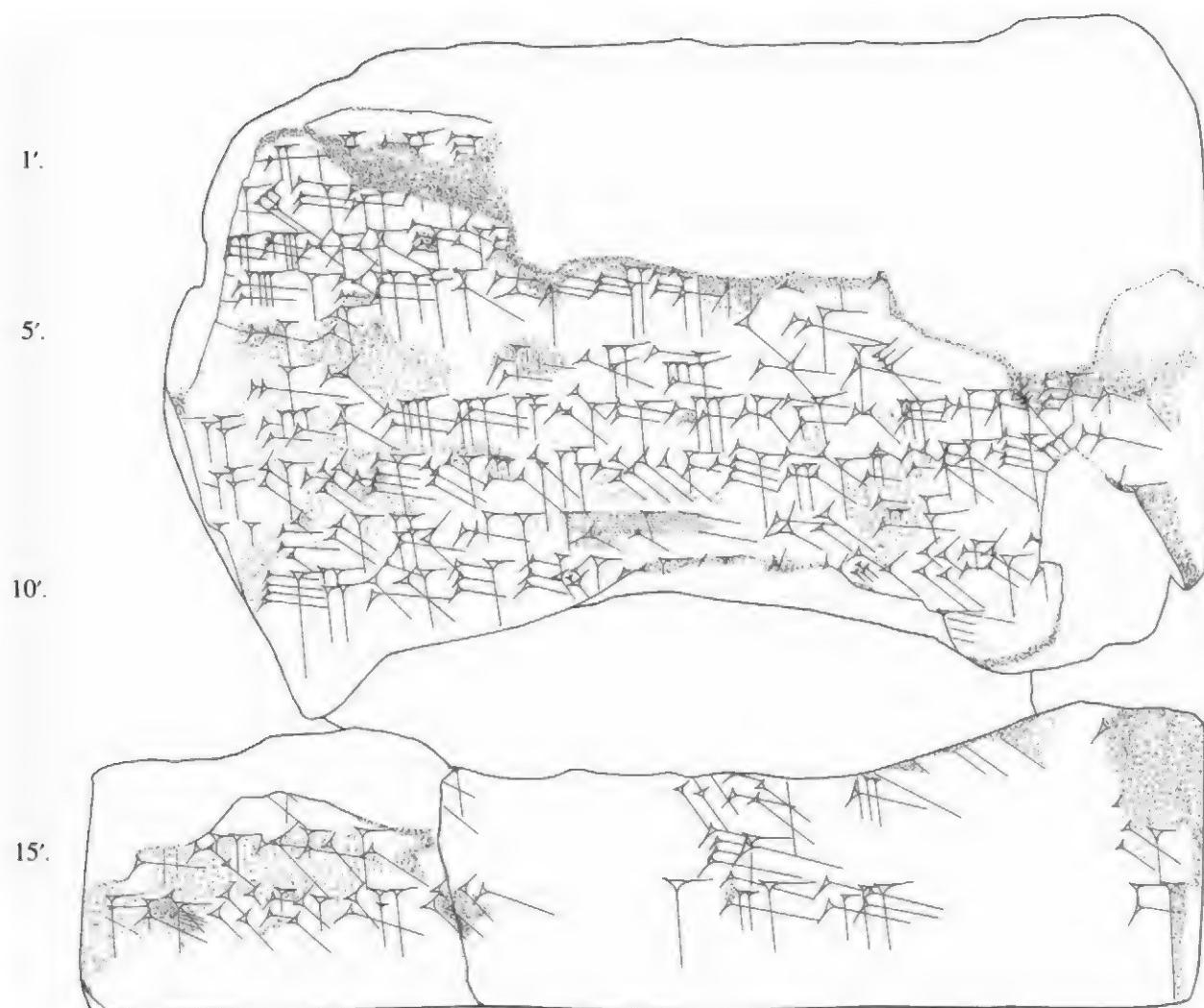
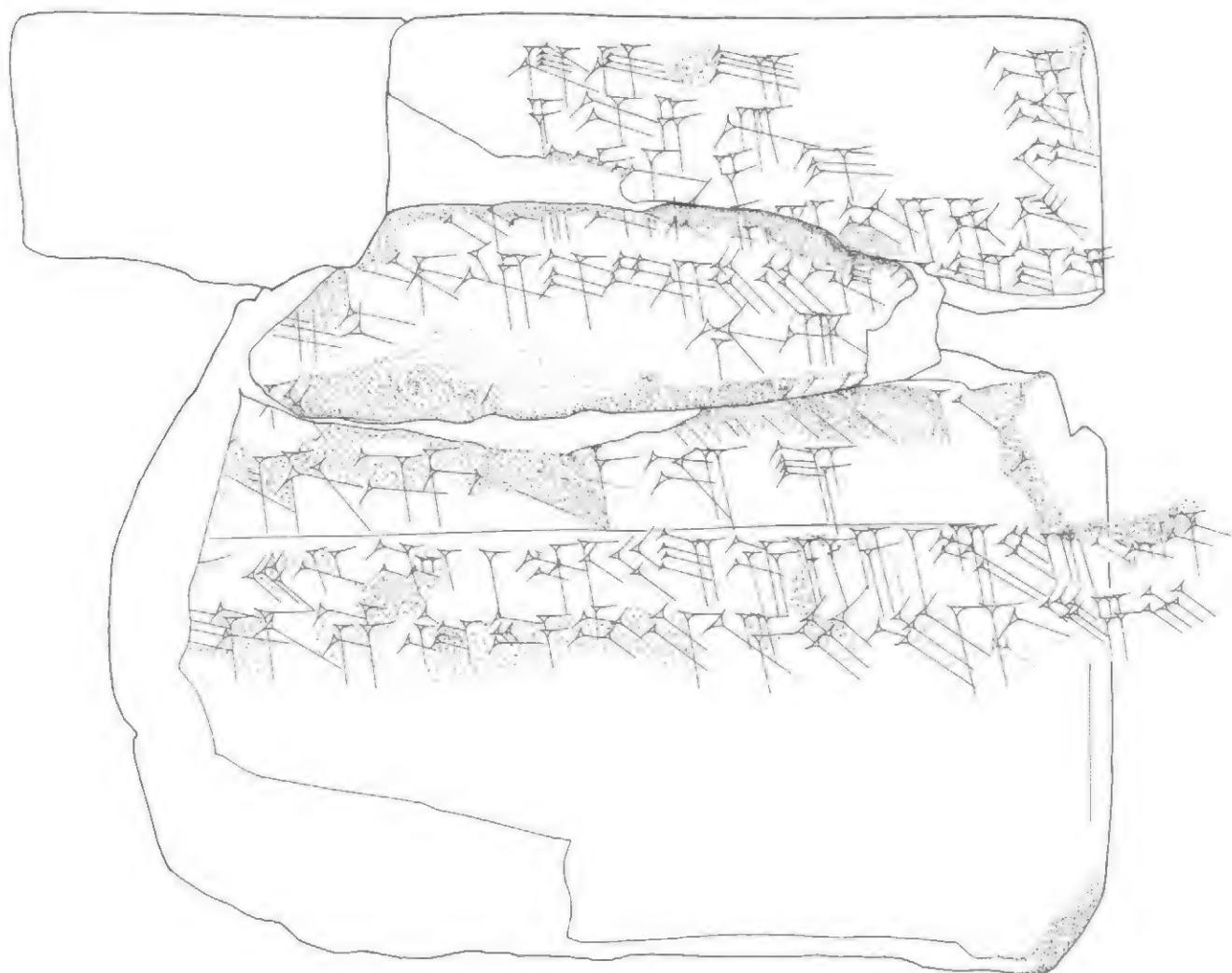


Plate 36

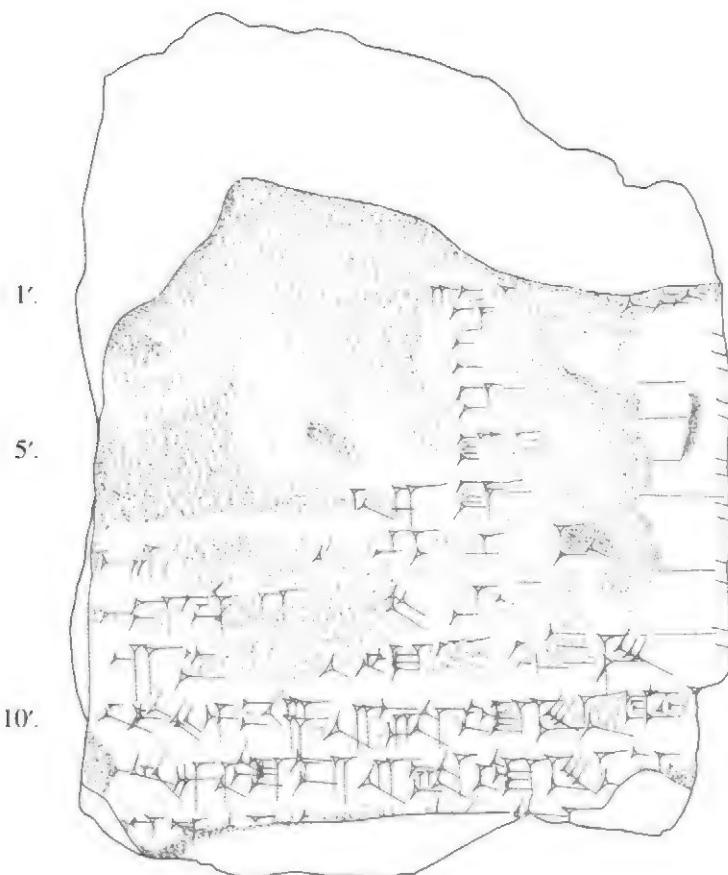
Text 22 Reverse

20'.

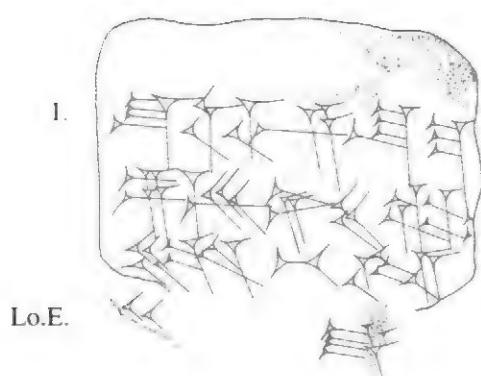
25'.



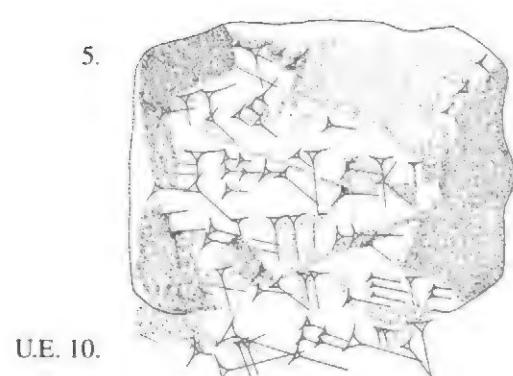
Text 23



Text 24 Obverse

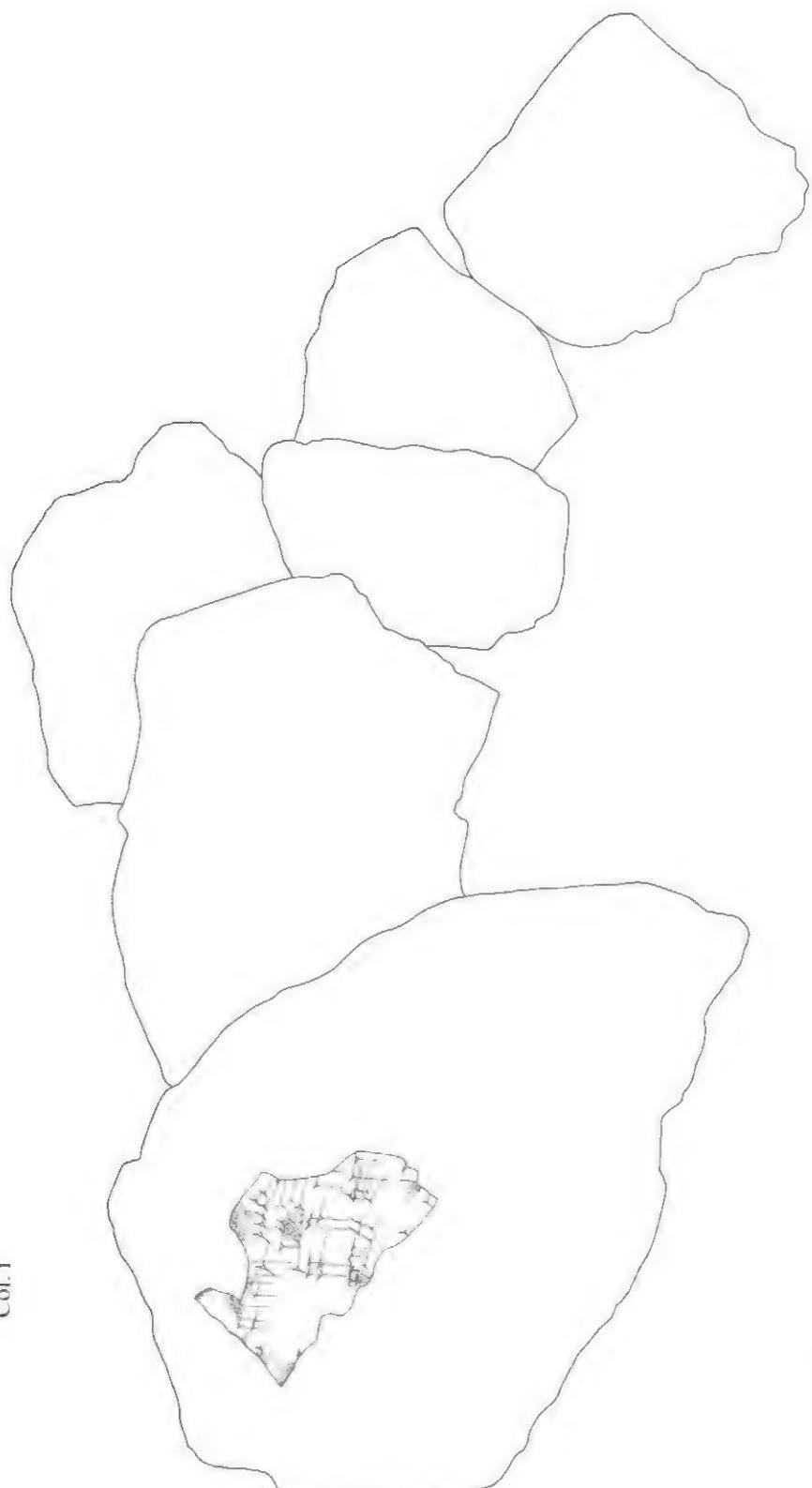


Text 24 Reverse



Text 25 Obverse

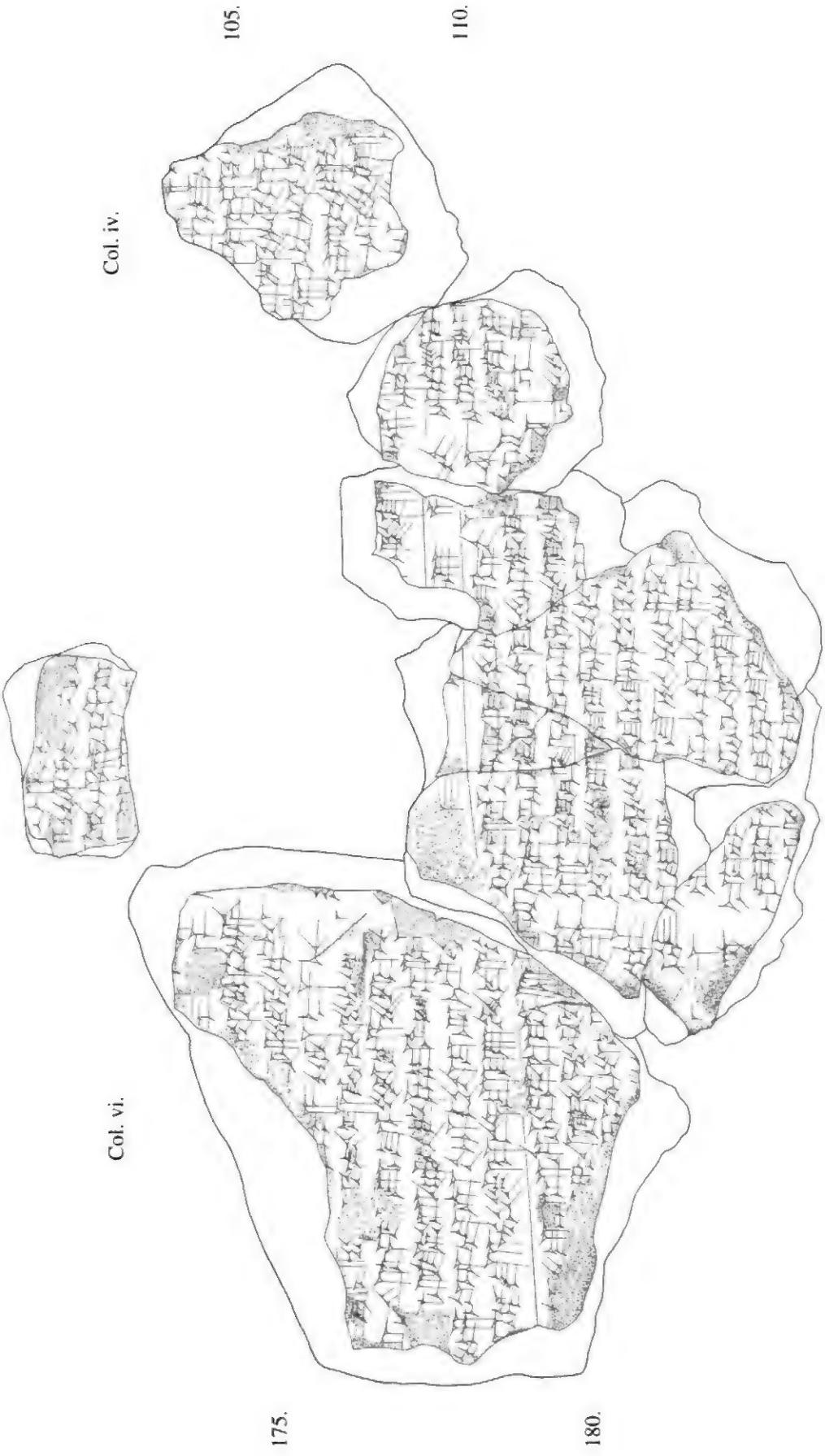
Col. i



25.

Scale: 80% of 3:2

Text 25 Reverse



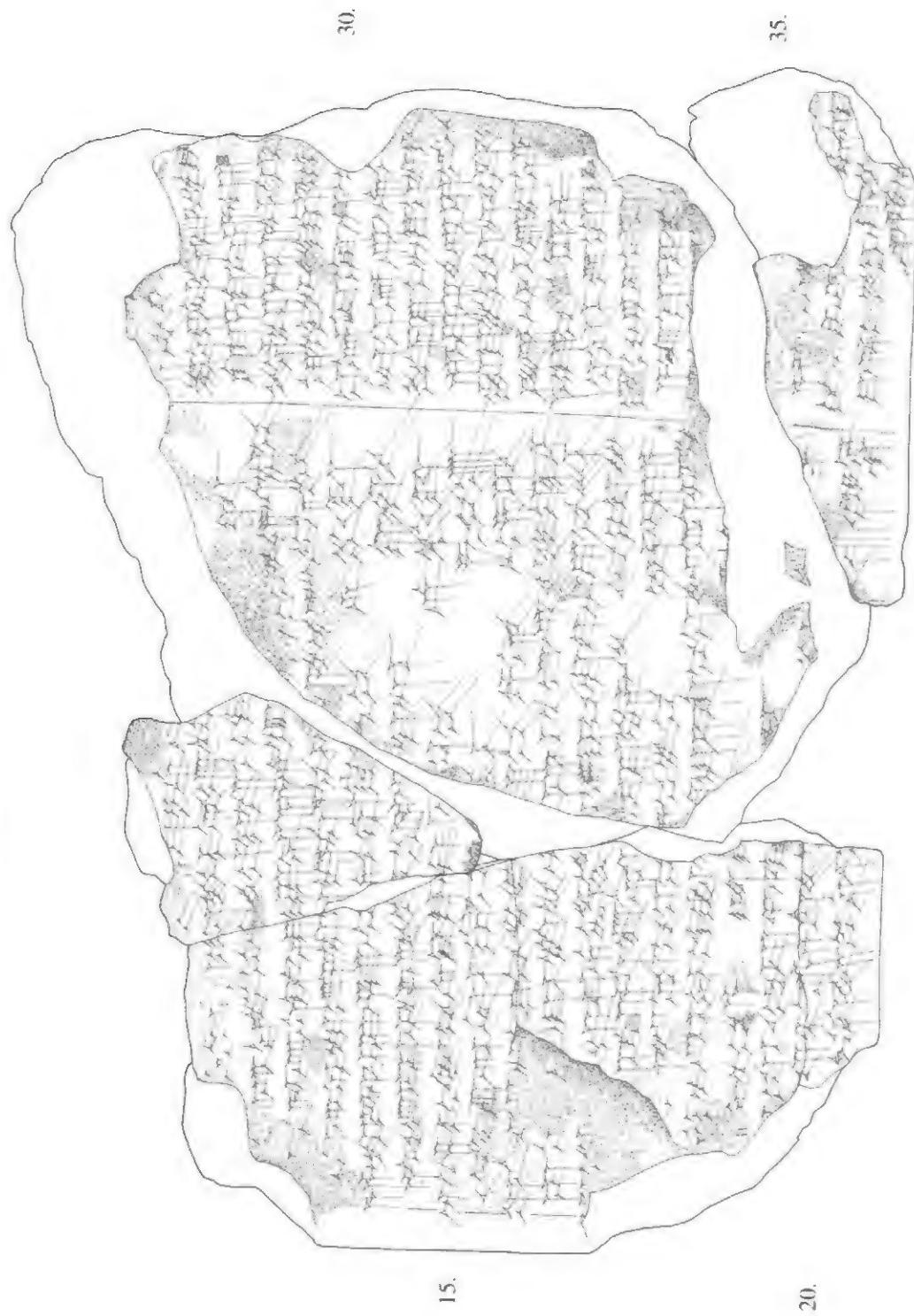
Scale: 80% of 3:2

Plate 40

Text 26 Obverse

Col. i.

Col. ii.



15.

30.

20.

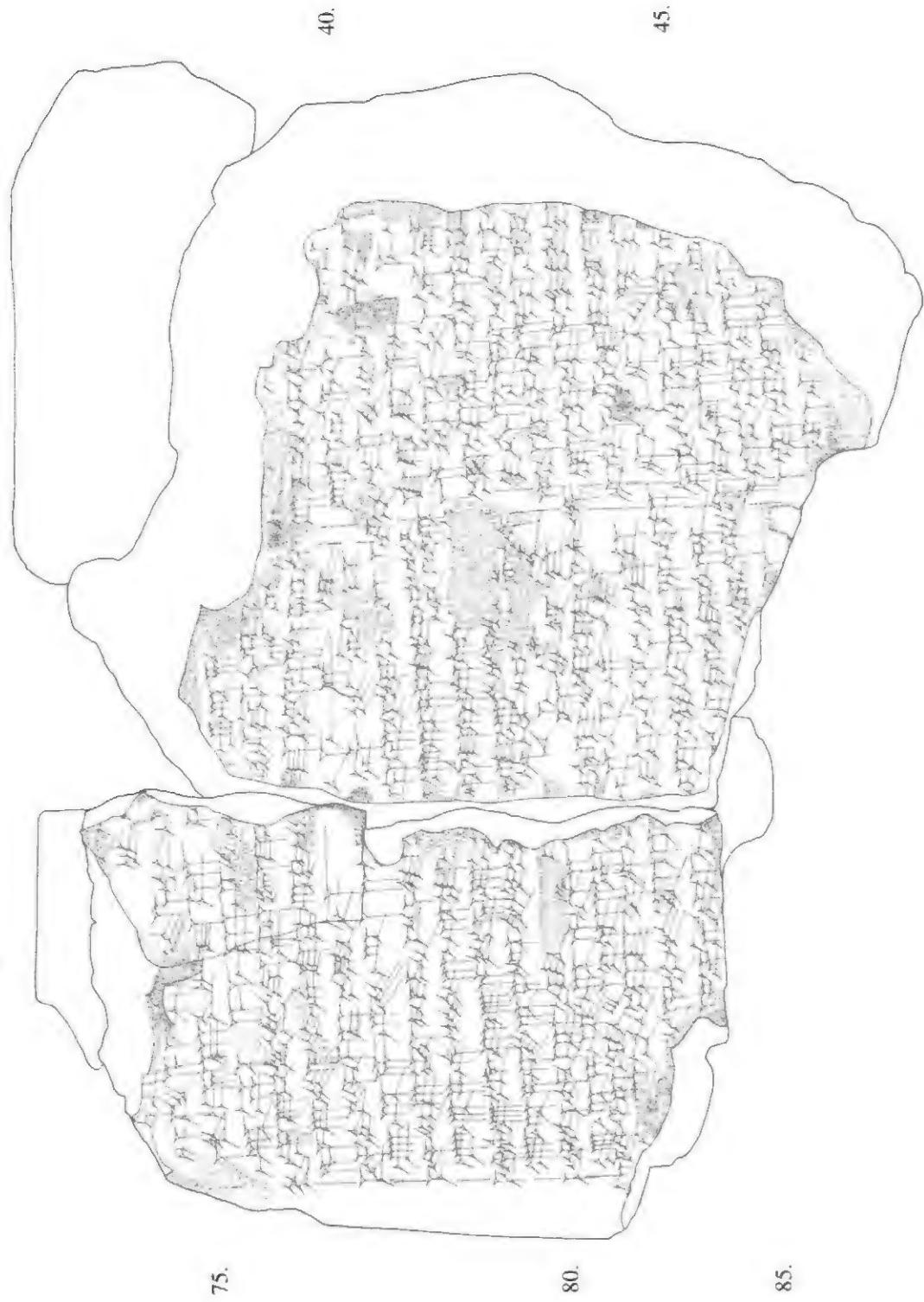
35.

Scale: 80% of 3:2

Text 26 Reverse

Col. iii.

Col. iv.

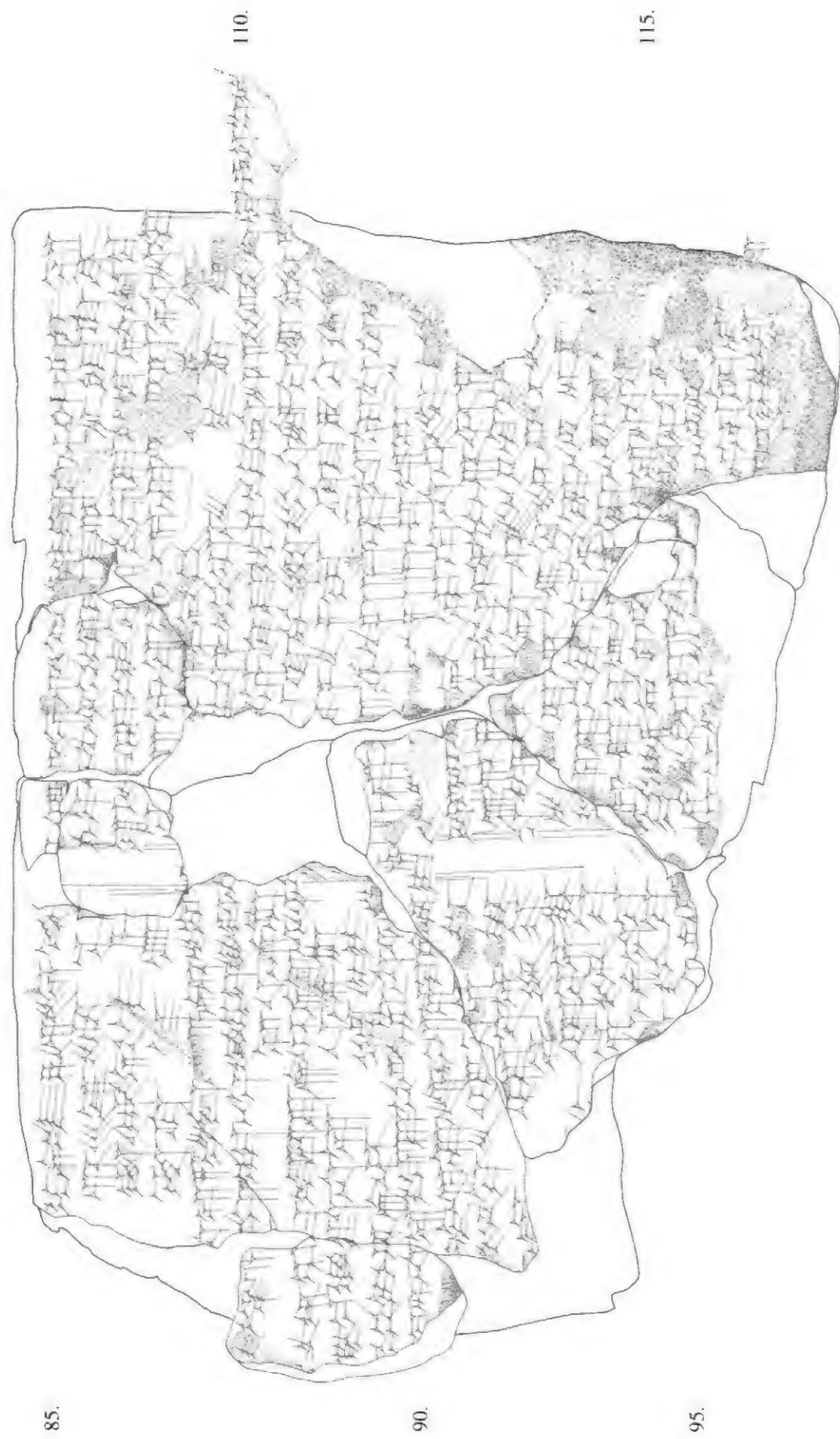


Scale: 80% of 3:2

Text 27 Obverse

Col. i.

Col. ii.



Scale: 80% of 3:2

Text 27 Reverse

Col. iii.
Col. iv.



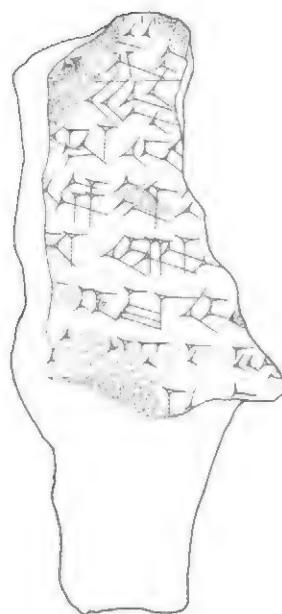
Scale: 80% of 3:2

Plate 44

Text 27 Reverse

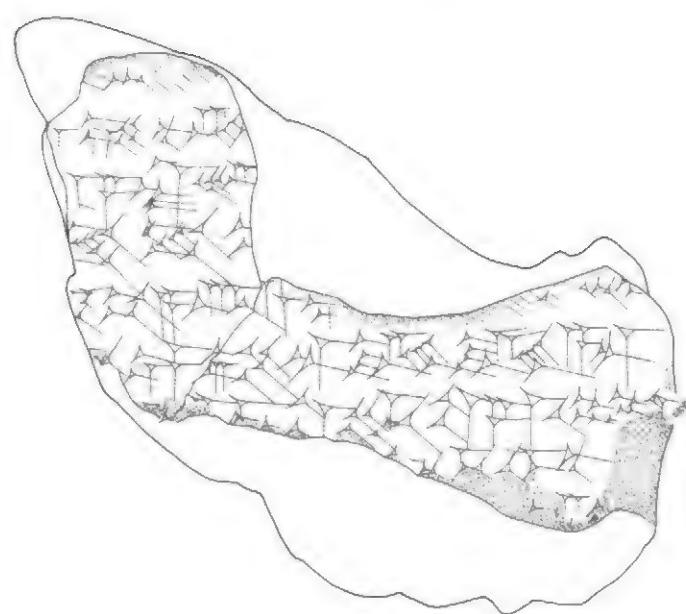
Col. iii.

140.

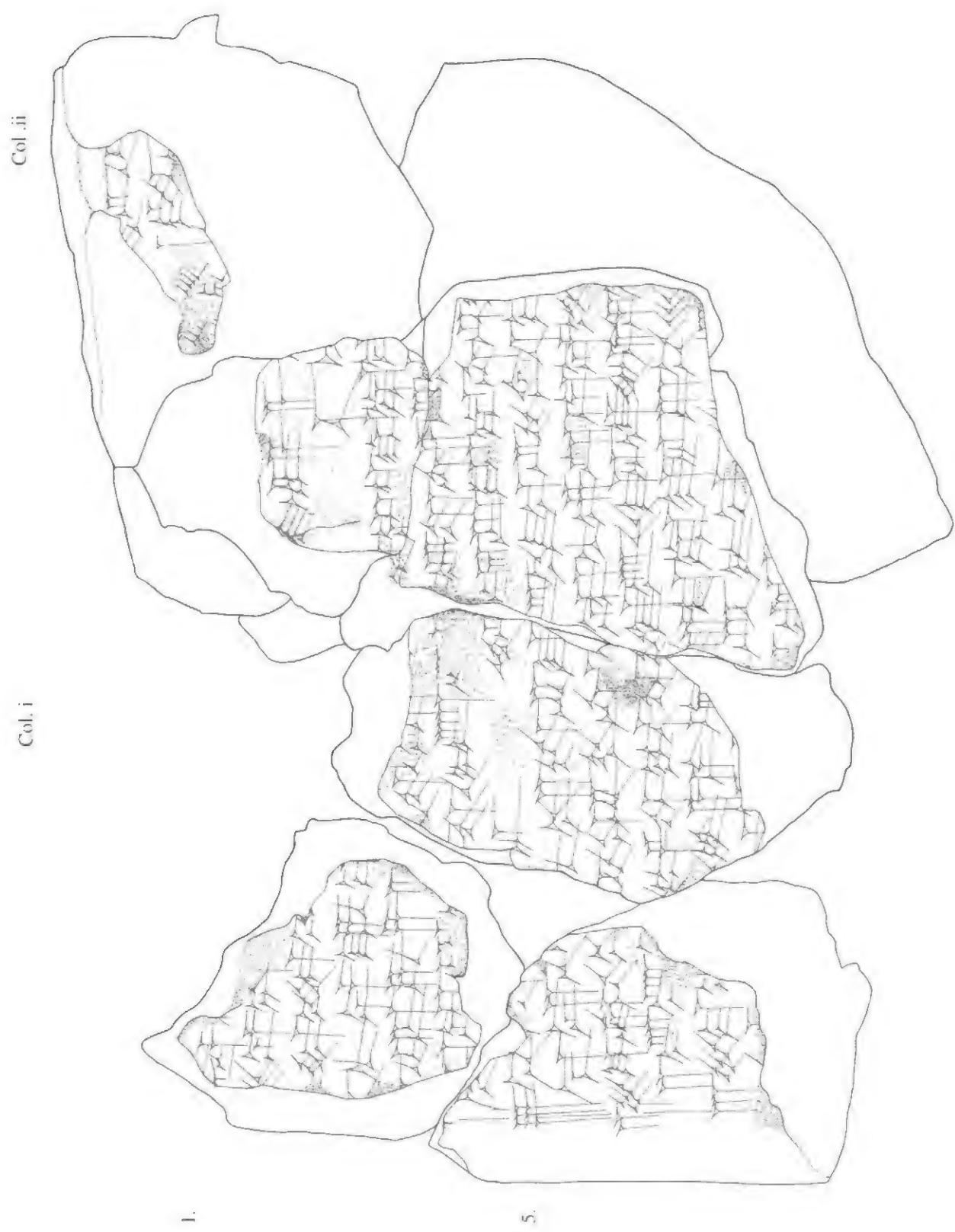


Text 28 Obverse

125.



Text 29 Obverse



Text 29 Reverse

Col. iii



60.

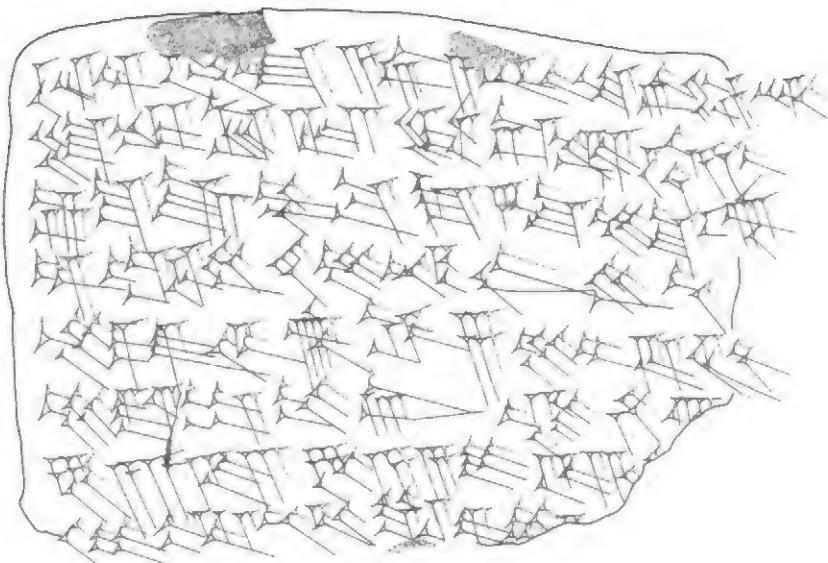
65.

Plate 46

45.

Text 30 Obverse

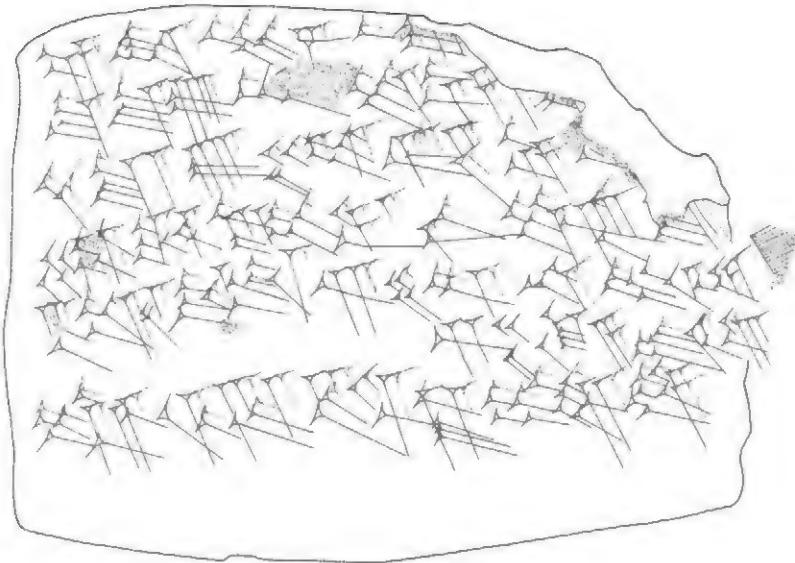
1.



5.

Text 30 Reverse

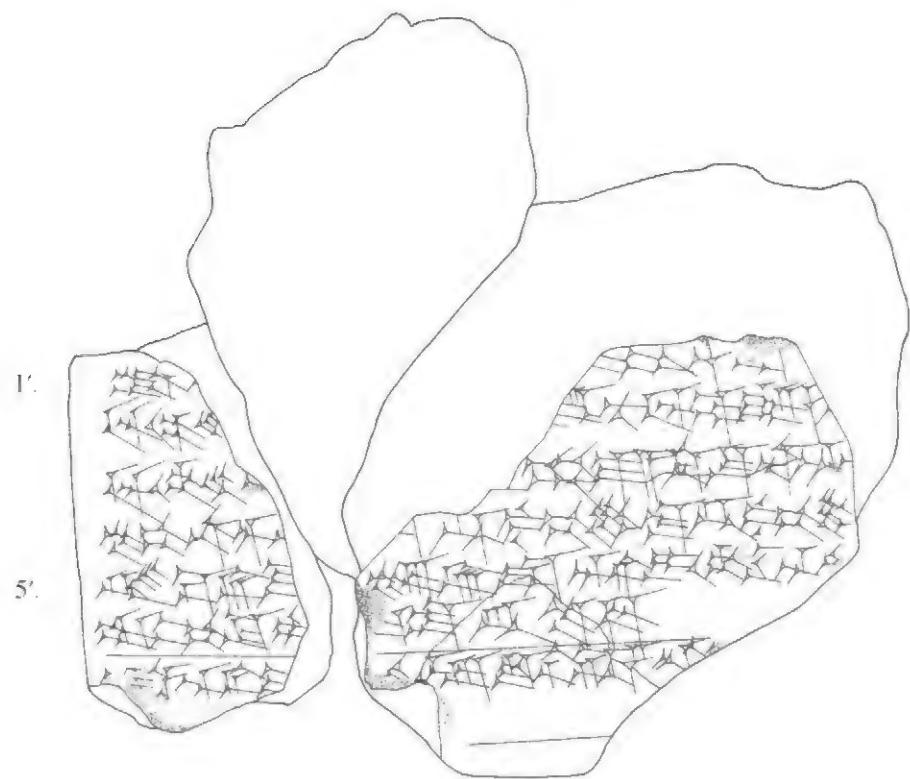
10.



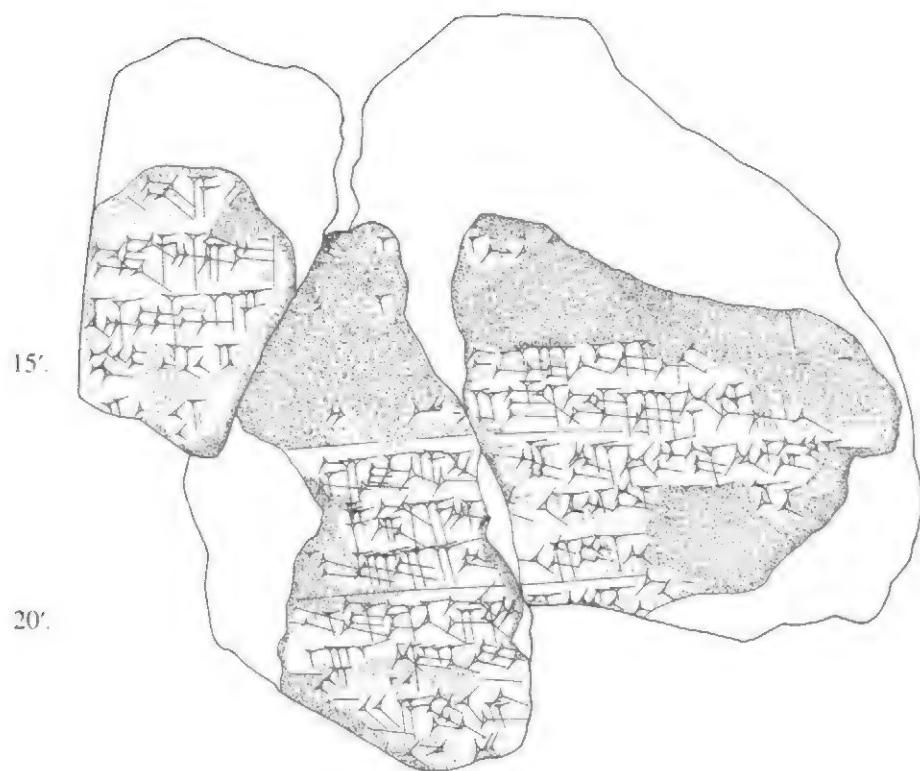
15.

Plate 48

Text 31 Obverse



Text 31 Reverse



Text 32 Obverse



Enlarged to 1.75 mm

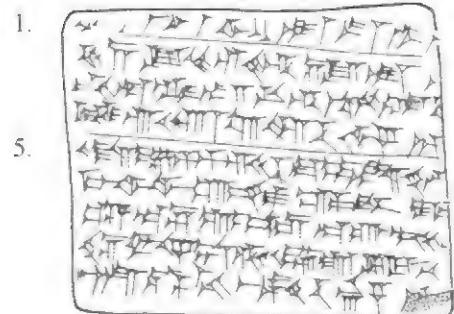
Plate 50

Text 32 Reverse



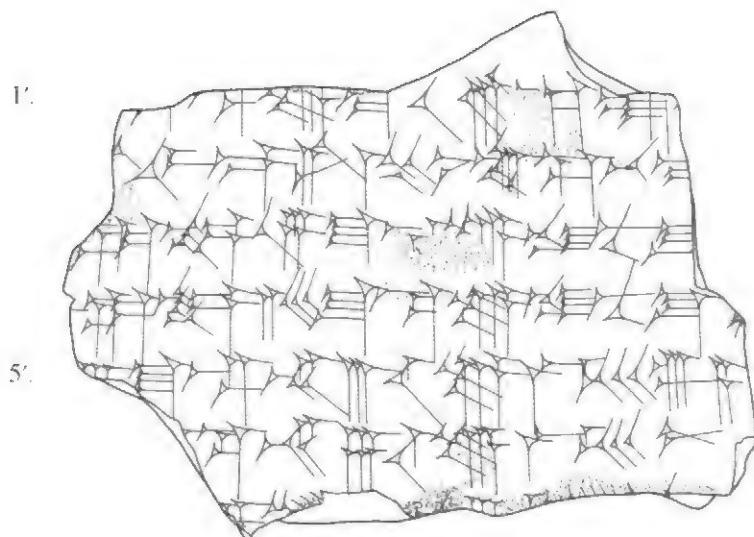
Enlarged to 1.75 mm

Text 33 Inscribed Side



Scale: 9:5 or 180%

Text 34 Obverse/Reverse(?)



Scale: 9:5 or 180%

Text 35 Obverse/Reverse(?)

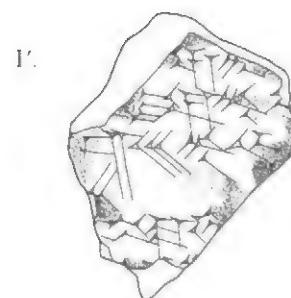
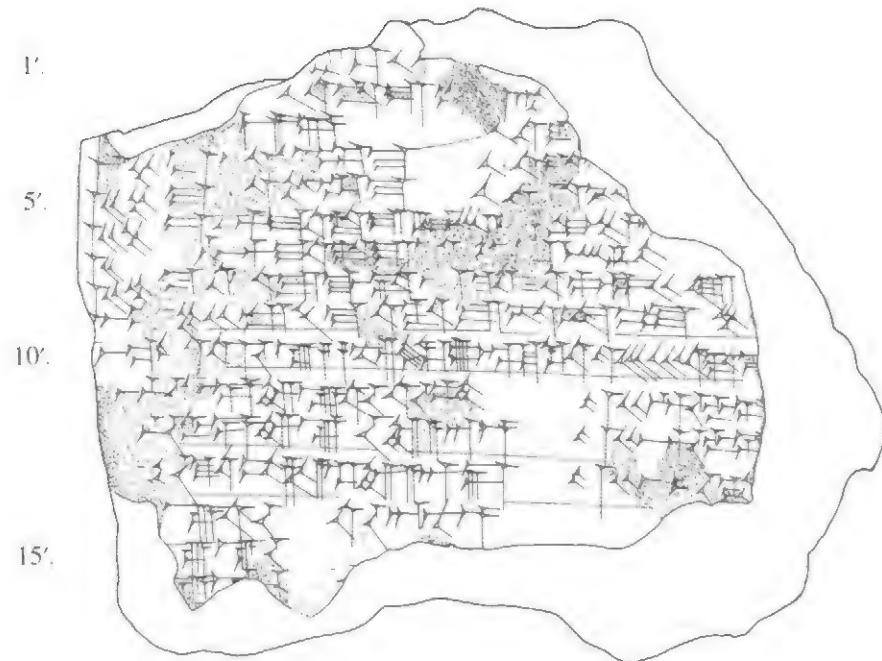
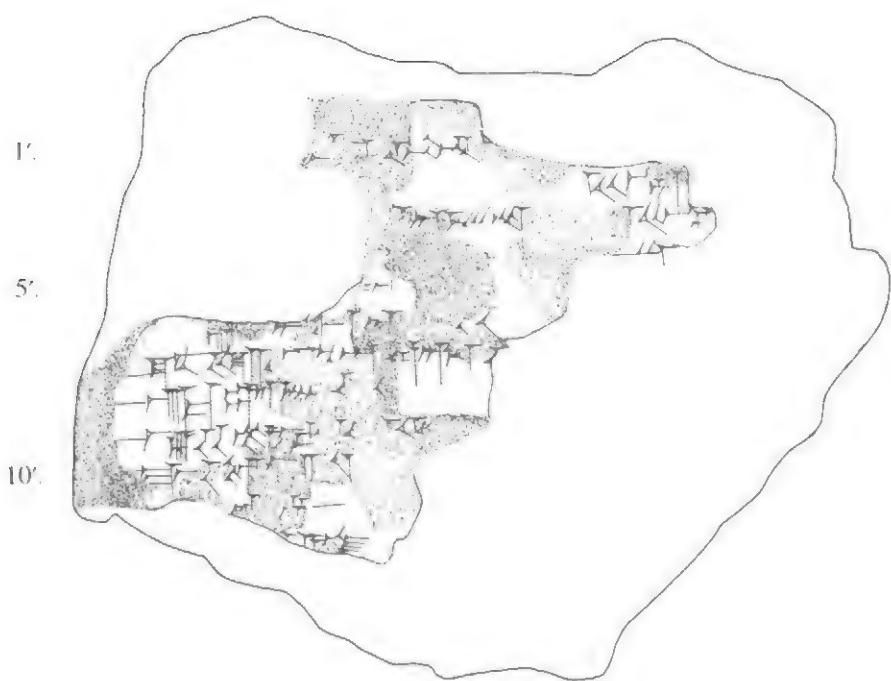


Plate 52

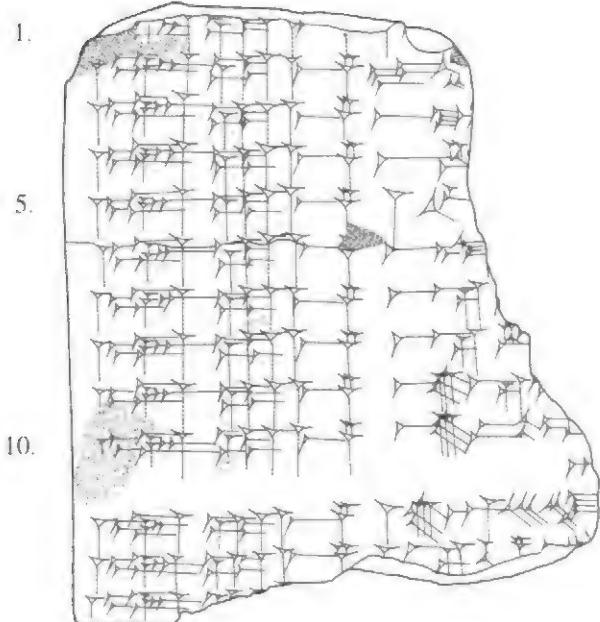
Text 36 Obverse



Text 36 Reverse



Text 37 Obverse



Text 37 Reverse

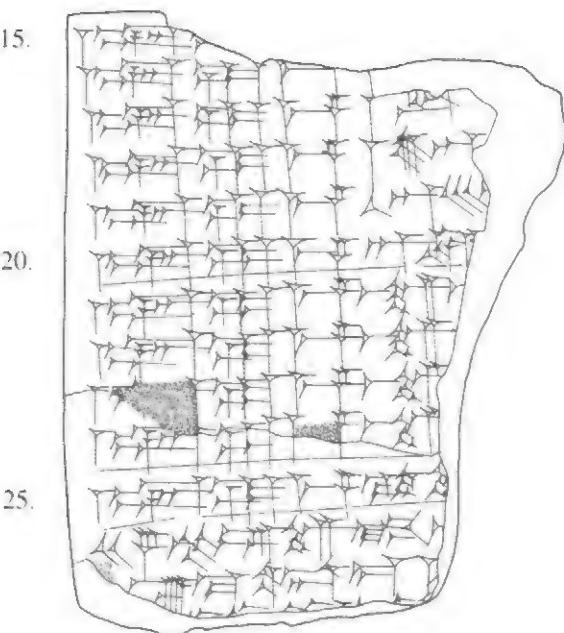
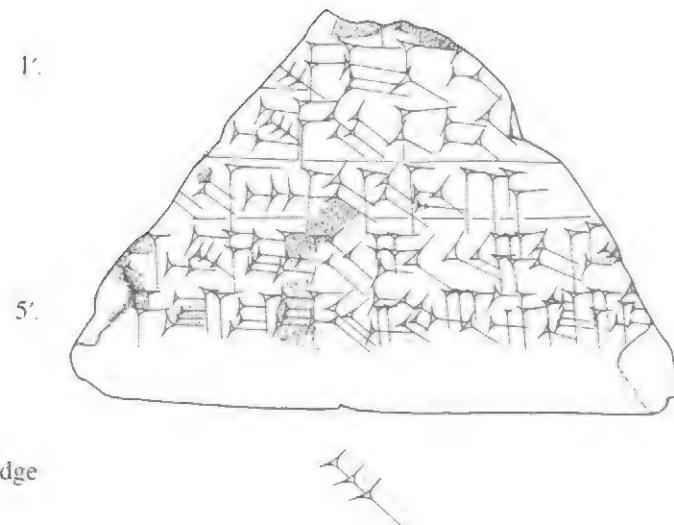
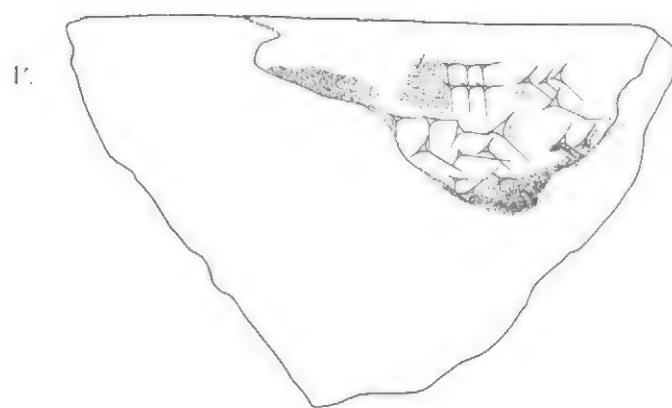


Plate 54

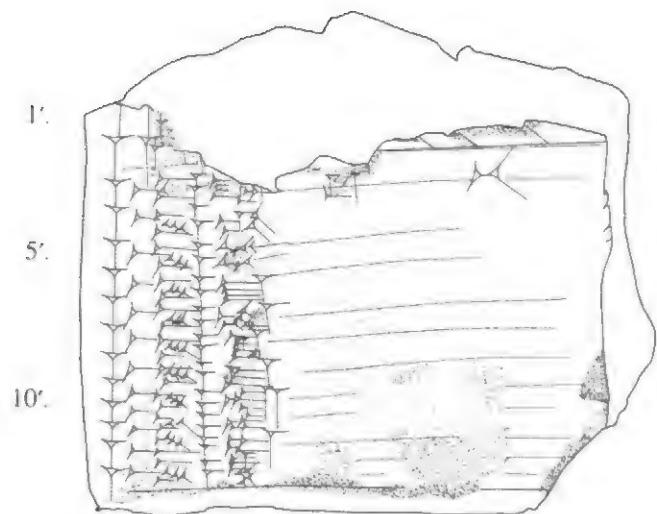
Text 38



Text 38



Text 39 Obverse



Text 39 Reverse

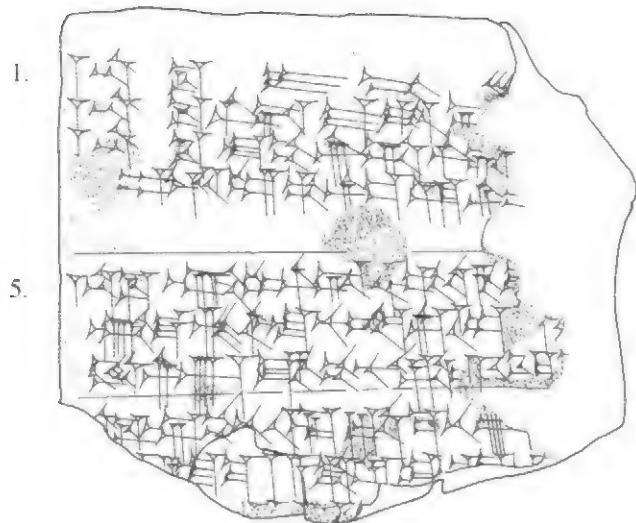
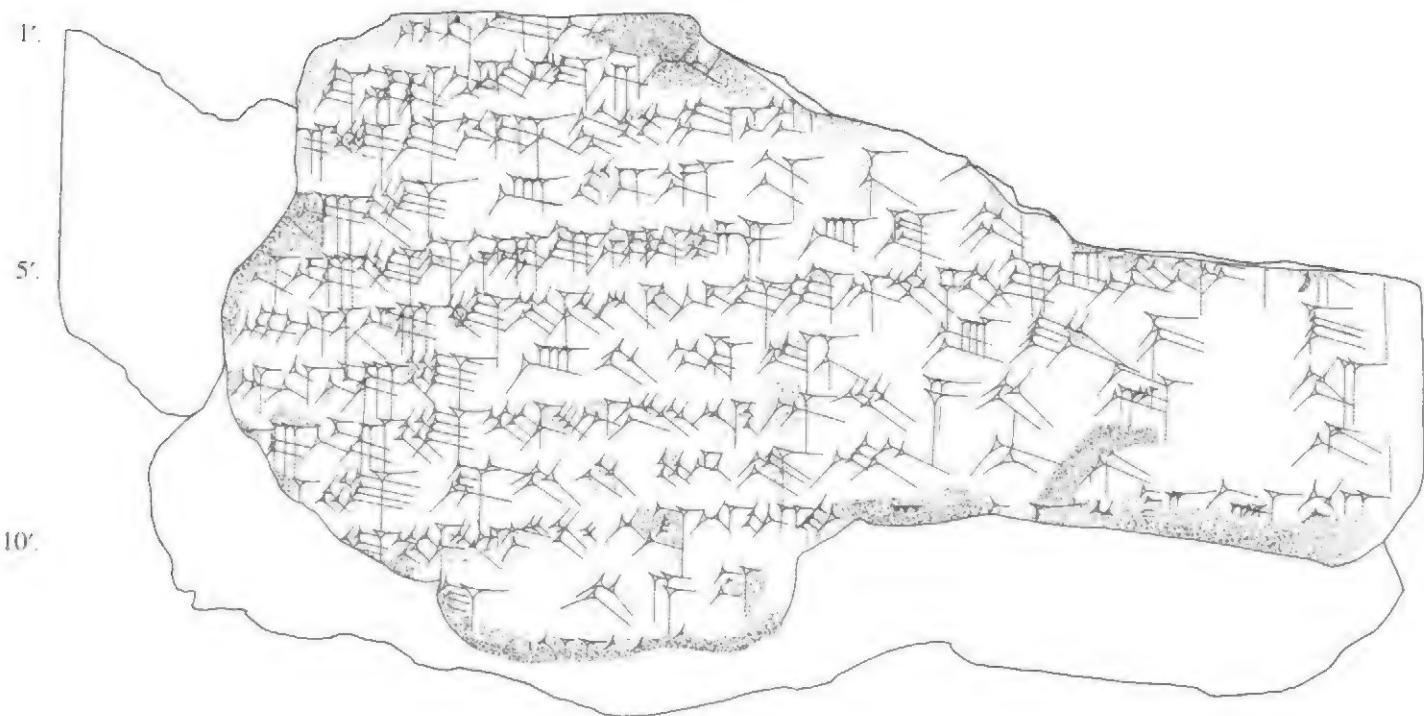
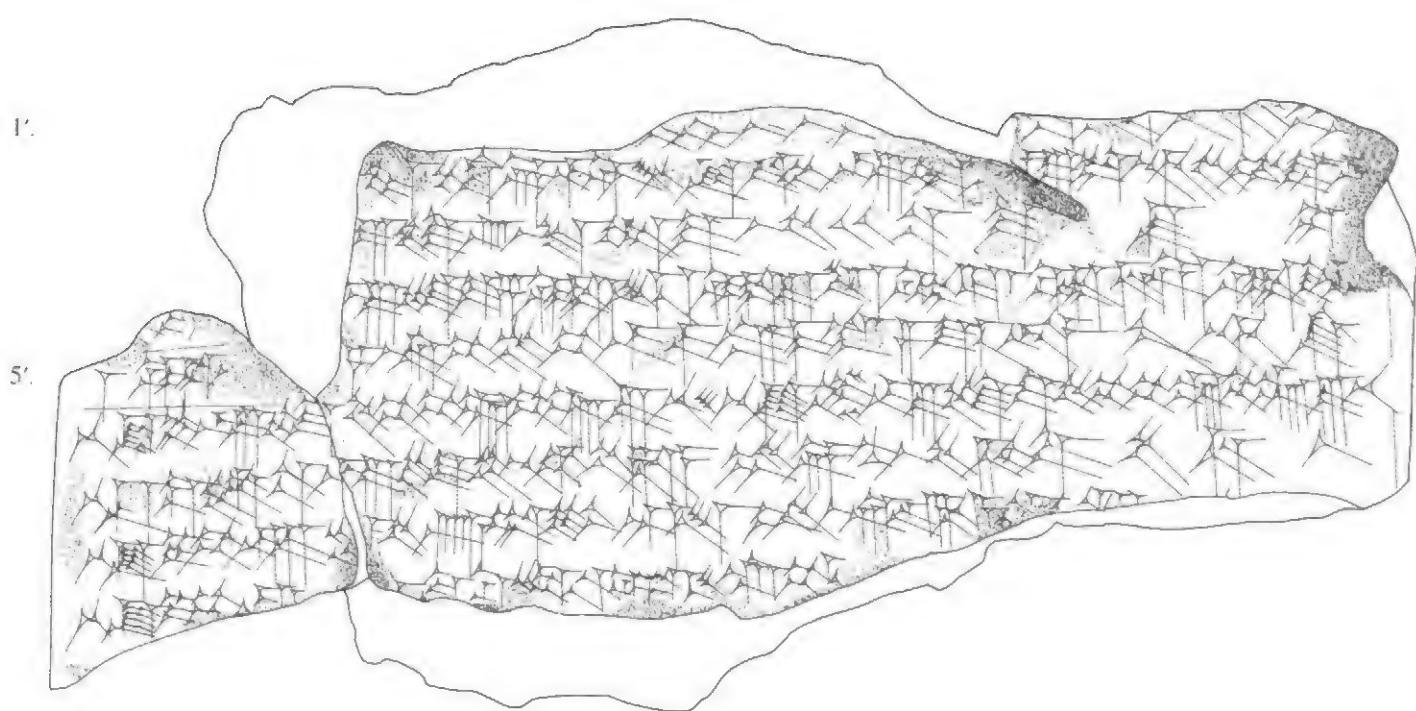


Plate 56

Text 40 Obverse



Text 40 Reverse



Text 41 Obverse

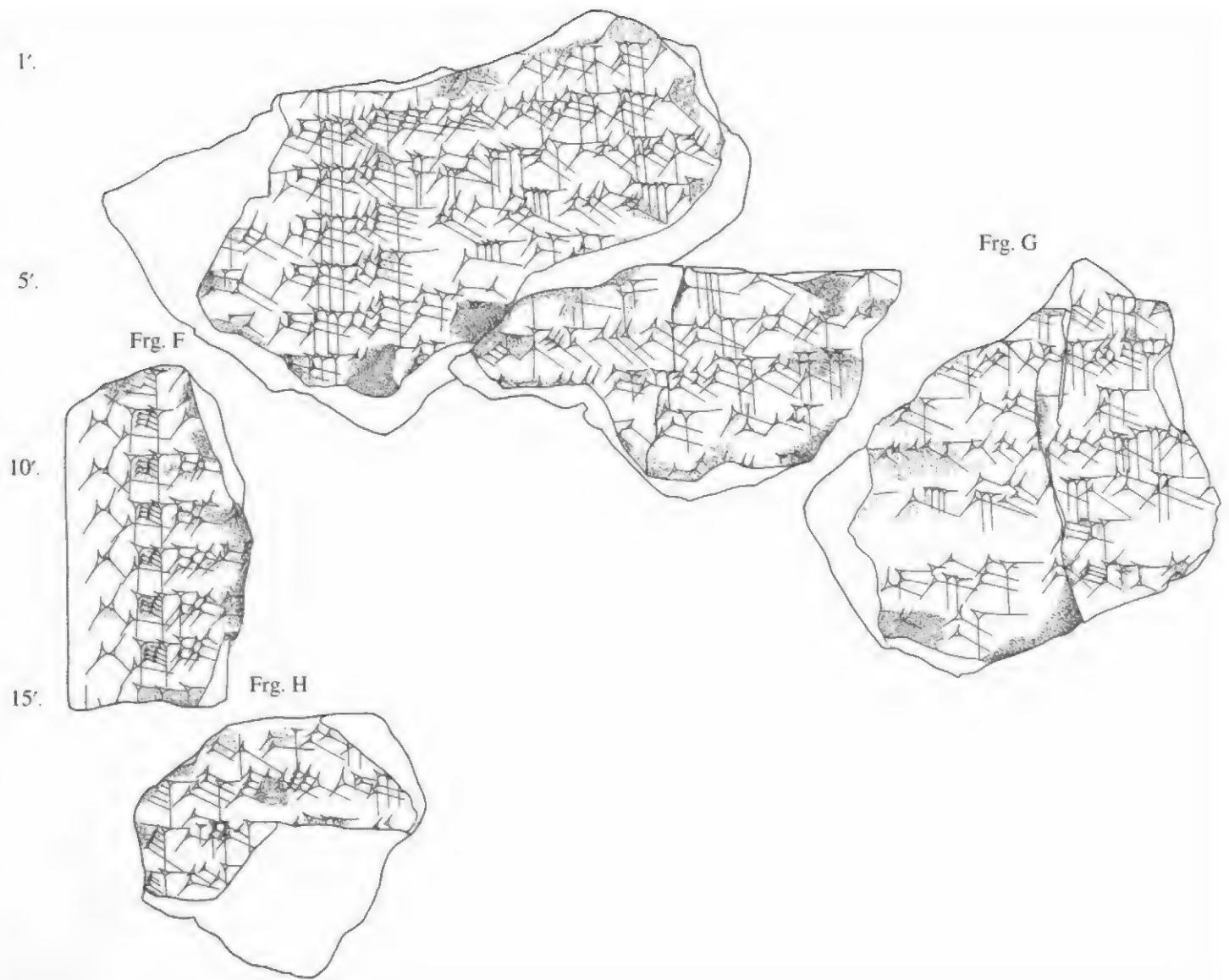
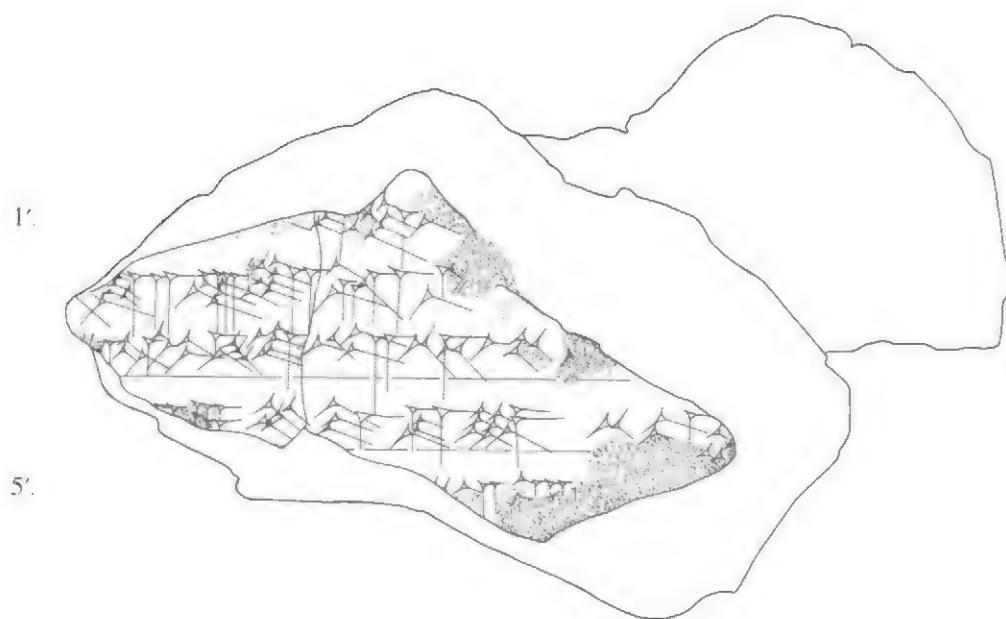


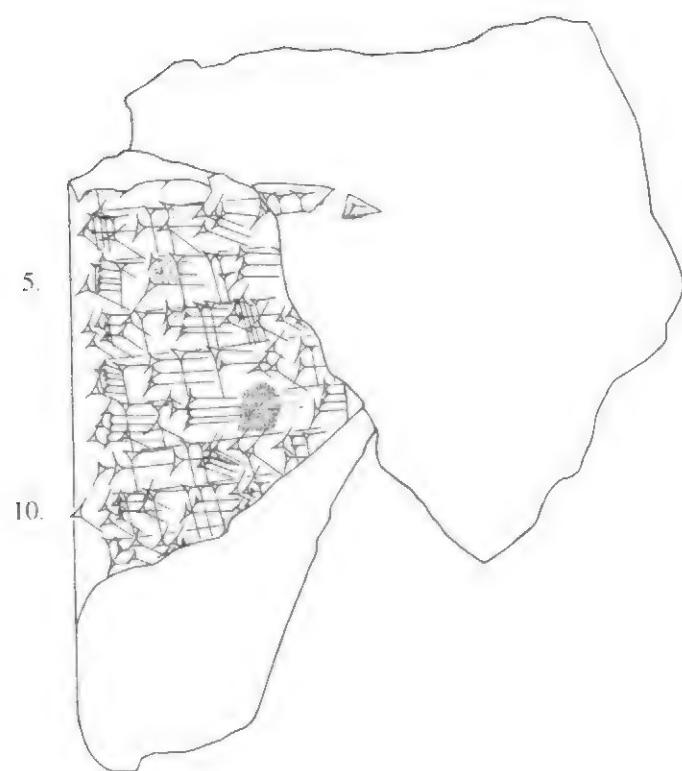
Plate 58

Text 41 Reverse



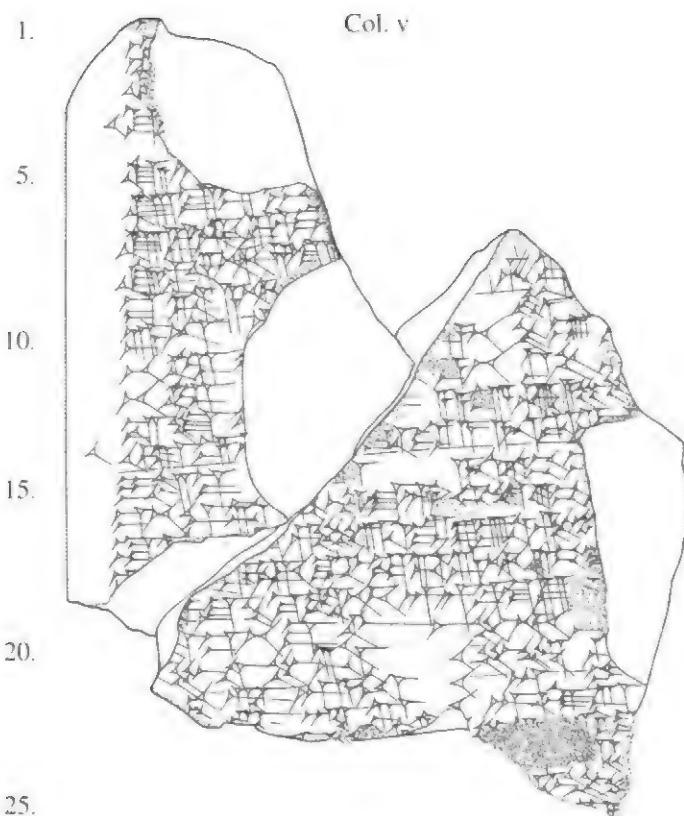
Text 42 Obverse

Col. i

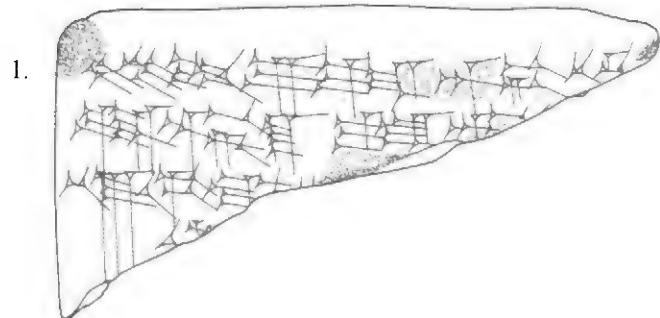


Text 42 Reverse

Col. v



Text 43 Obverse



Text 43 Reverse

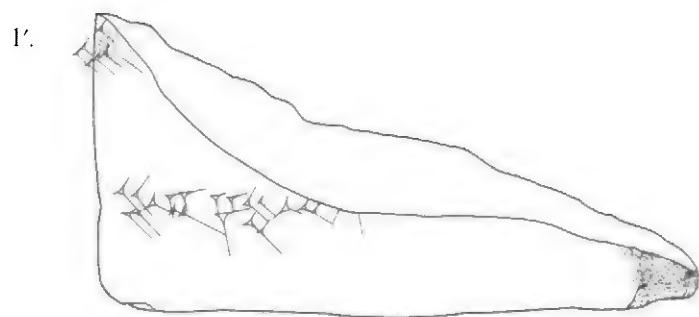
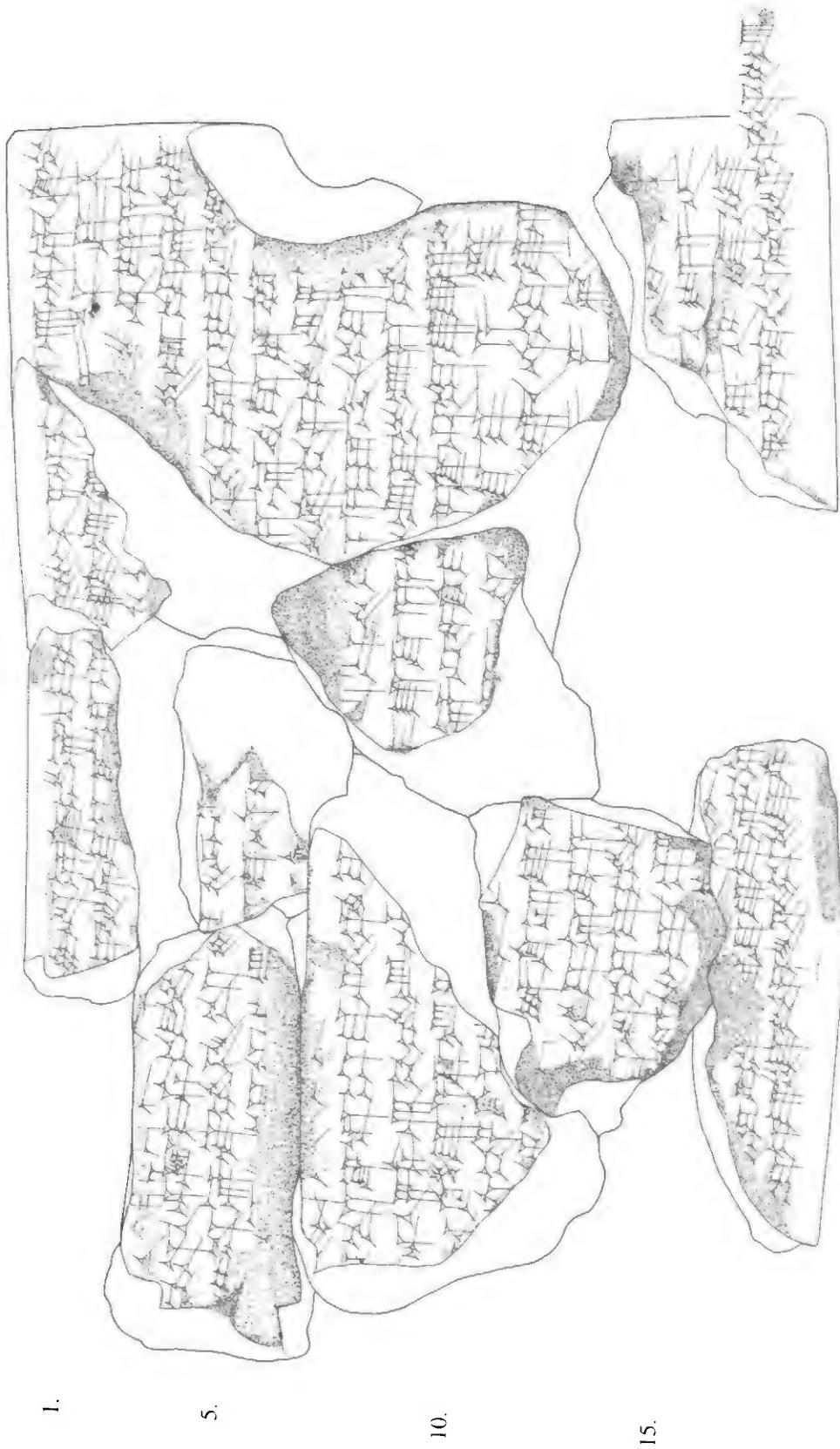


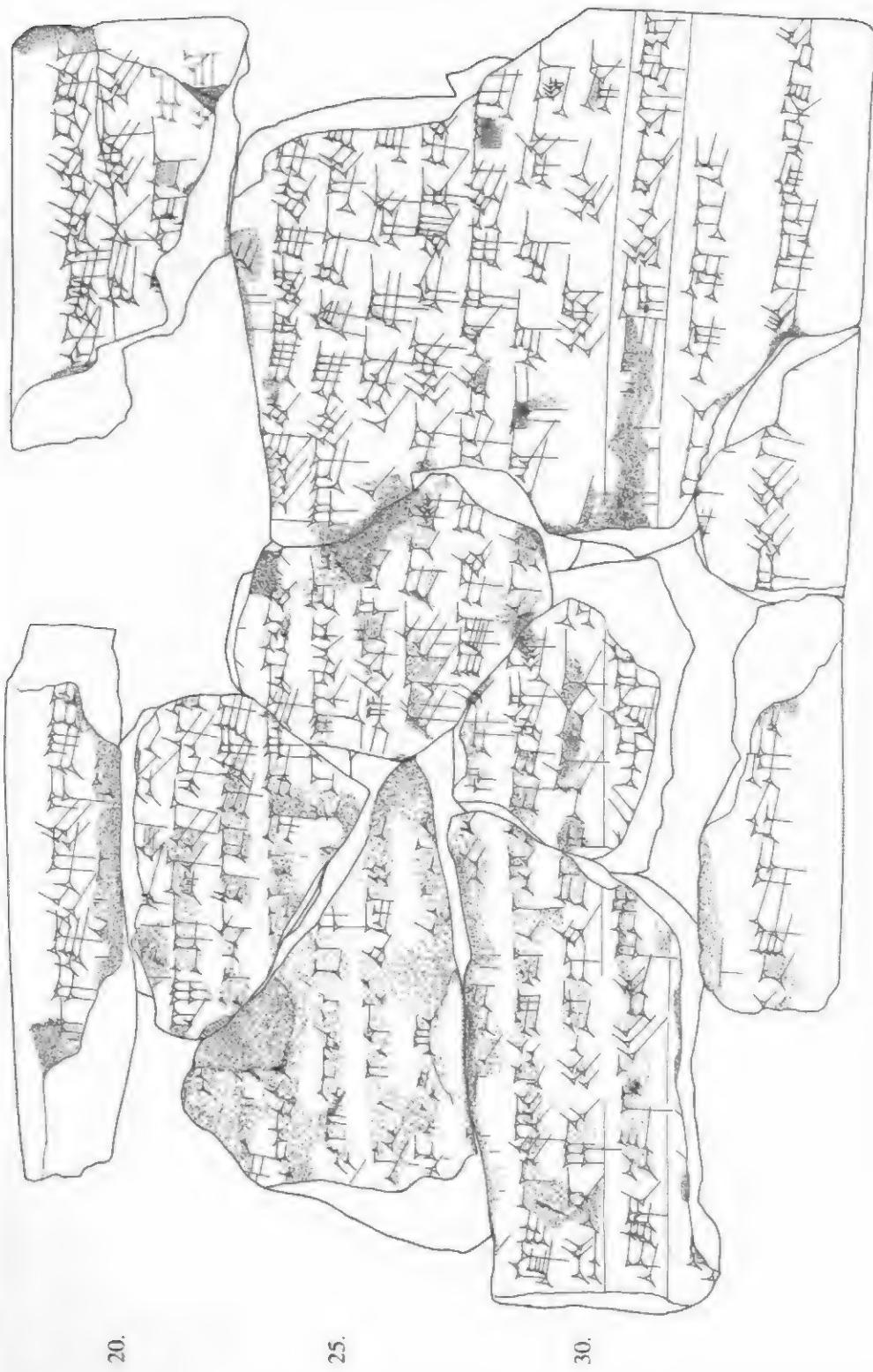
Plate 62

Text 44 Obverse



Scale: 85% of 3:2

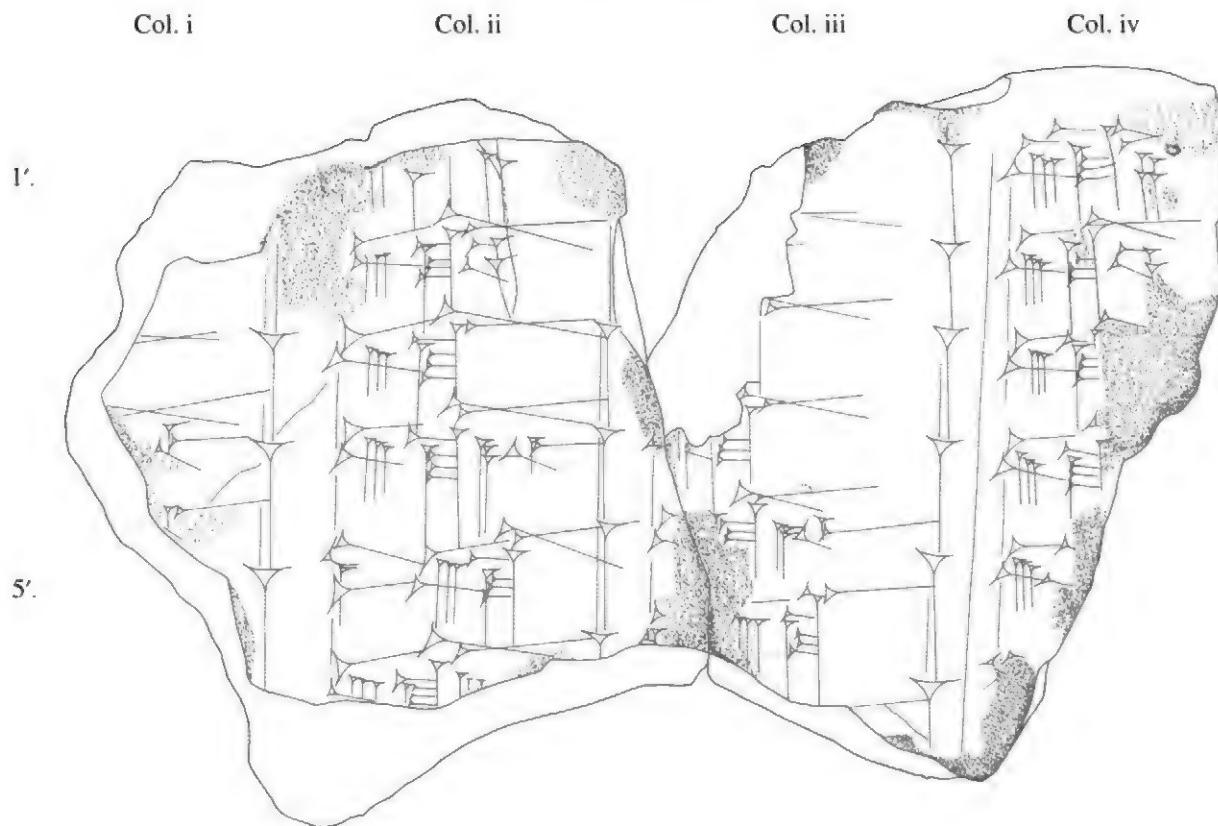
Text 44 Reverse



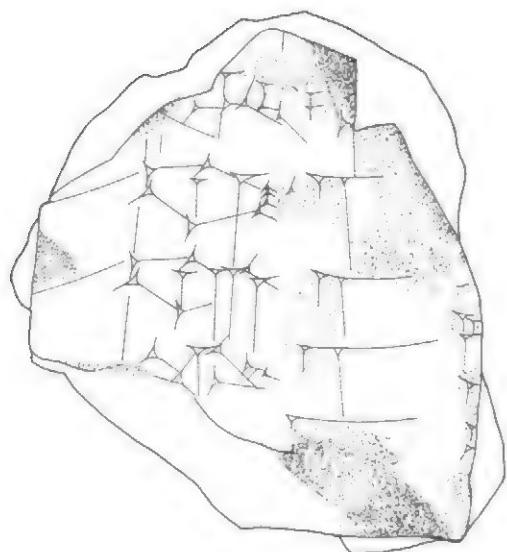
Scale: 85% of 3:2

Plate 64

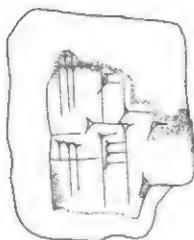
Text 45 Obverse



Text 45 Obverse



Text 45 Obverse



Text 45 Reverse

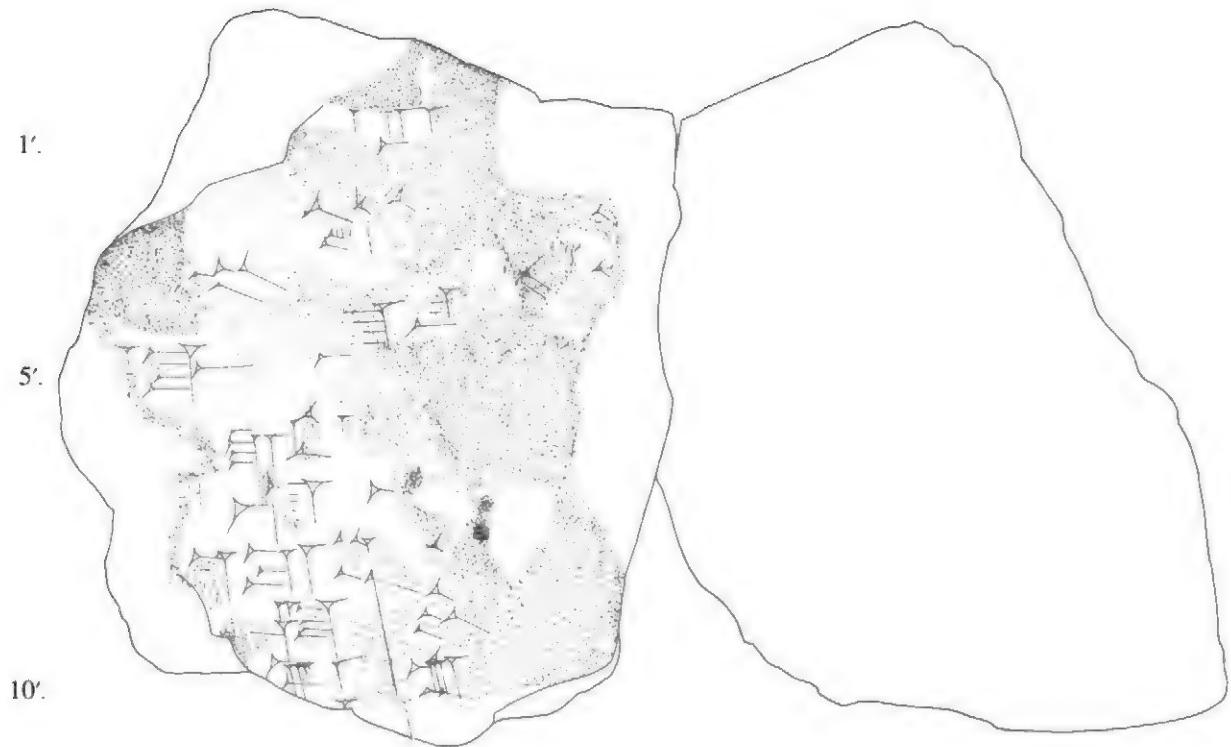
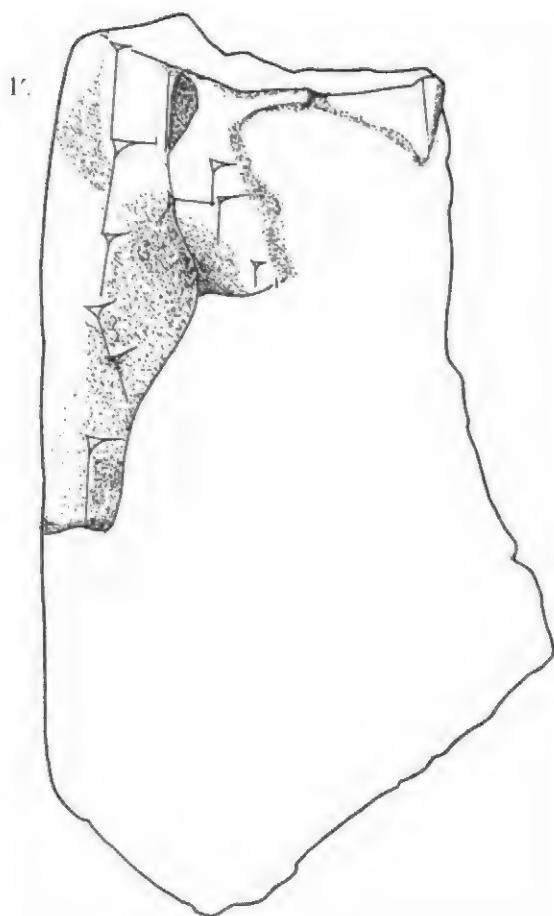


Plate 66

Text 46 Obverse

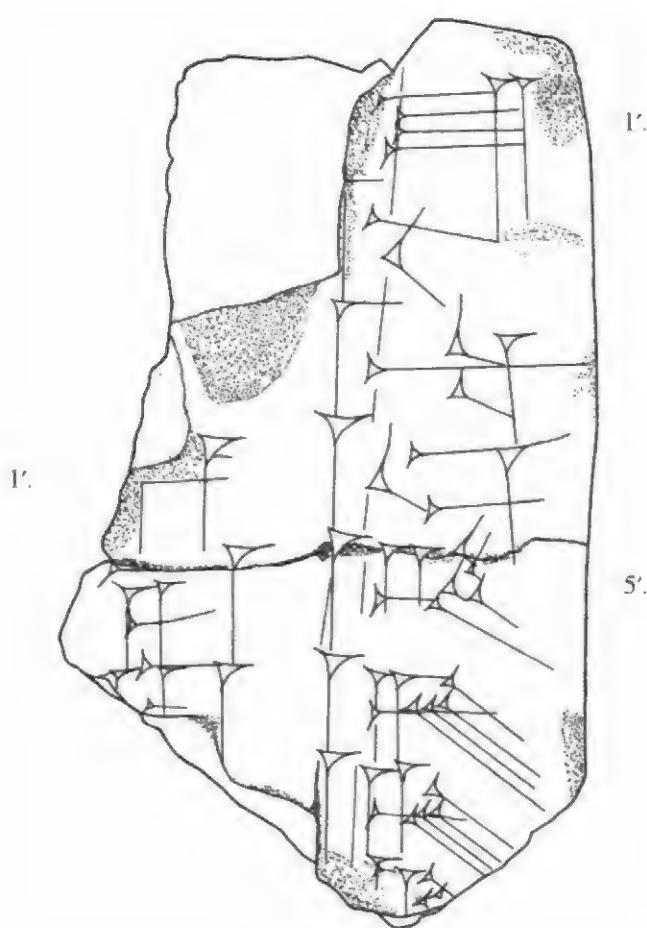
Left Col.



Text 46 Reverse

Left Col.

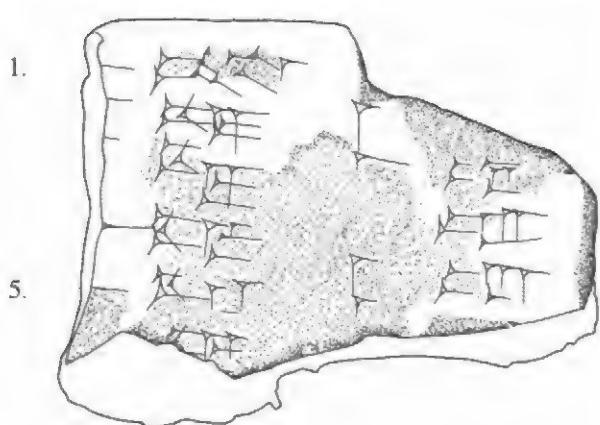
Central Col.



Text 47 Obverse

Left Col.

Right Col.

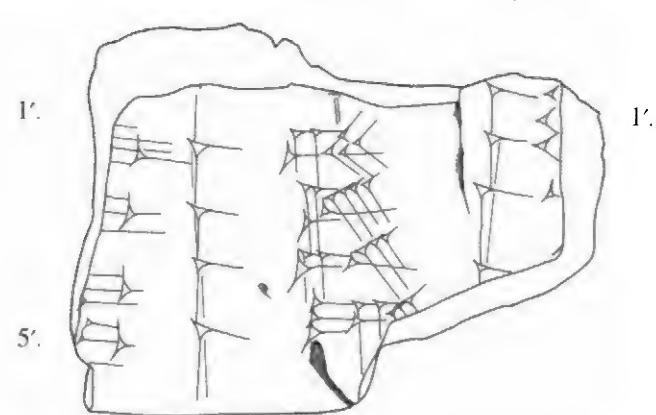


Text 47 Reverse

Left Col.

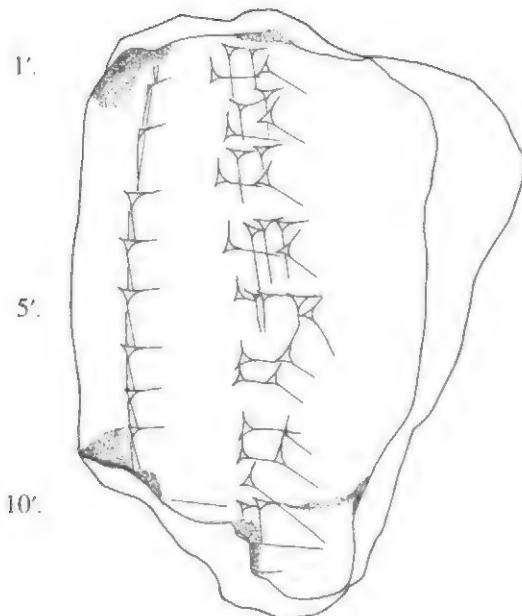
Central Col.

Right Col.



Text 48 Obverse

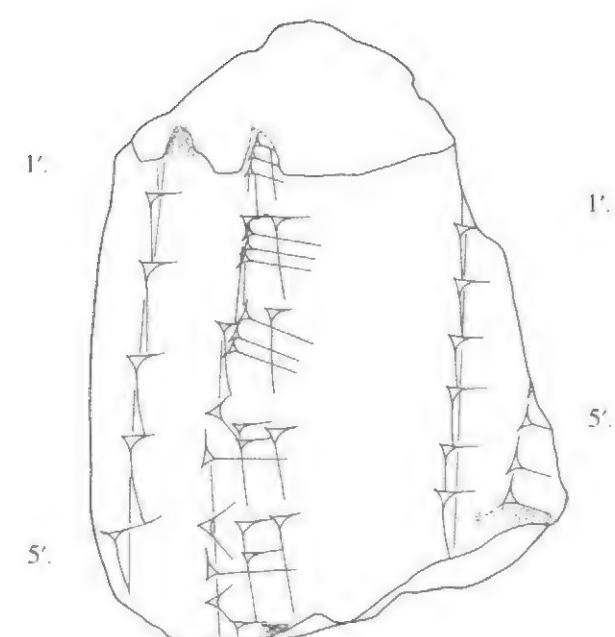
Left Col.



Text 48 Reverse

Left Col.

Right Col.



Text 49 Obverse

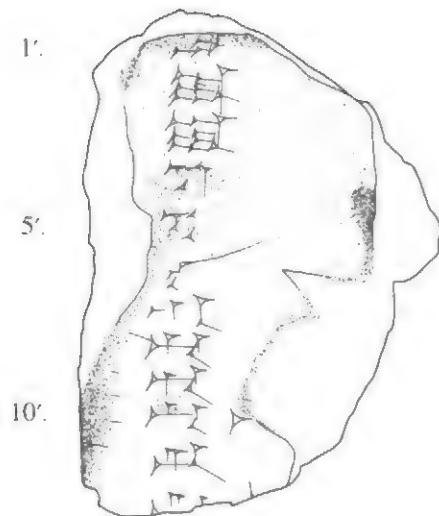


Plate 68

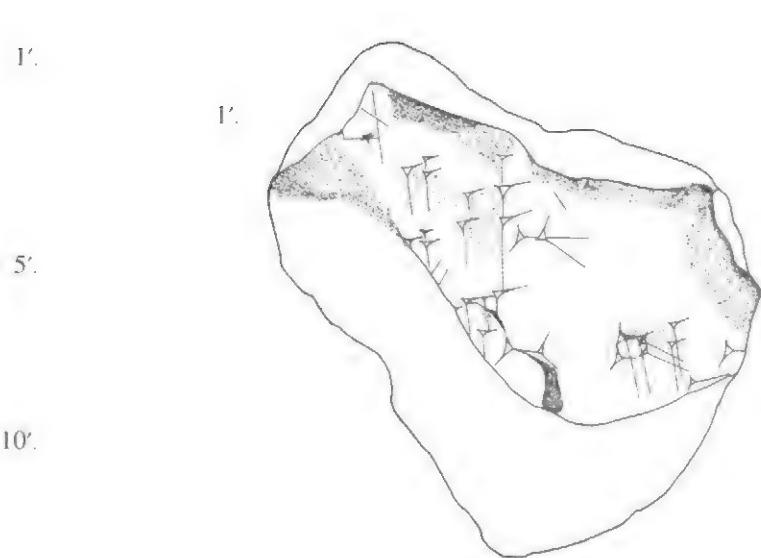
Text 50

Left Col.



Right Col.

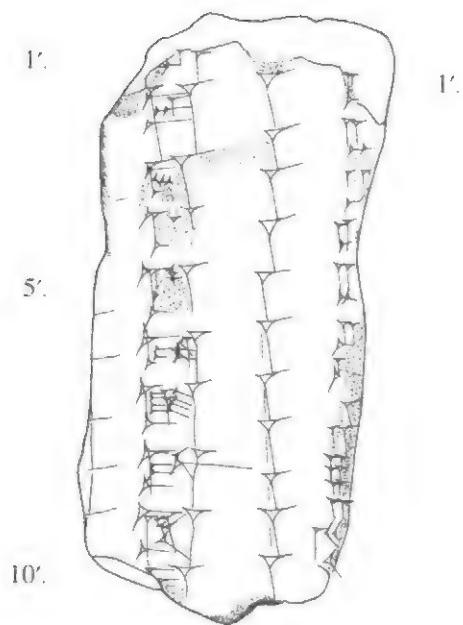
Text 50



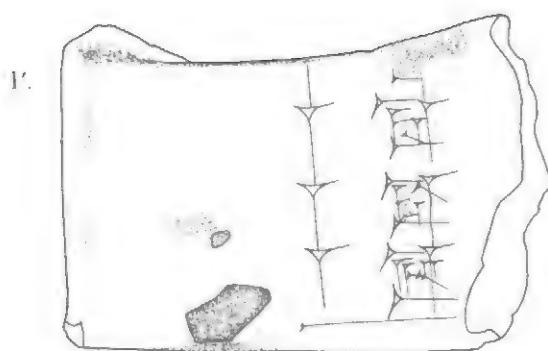
Text 51

Left Col.

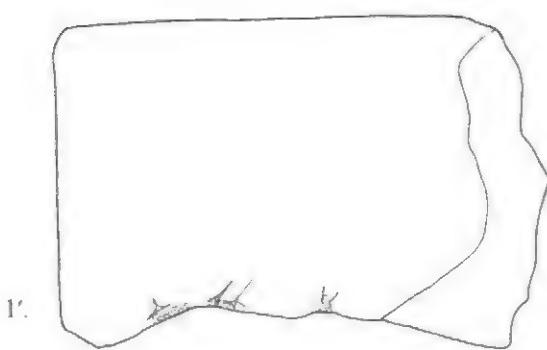
Right Col.



Text 52



Text 52



Text 53 Obverse

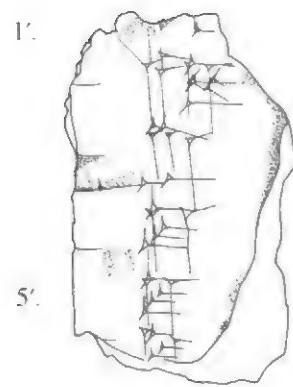


Plate 70

Text 54 Obverse

Col. i

Col. ii

Col. iii

Col. iv

Col. v



Text 54 Reverse

Col. iv

Col. iii

Col. ii

Col. i

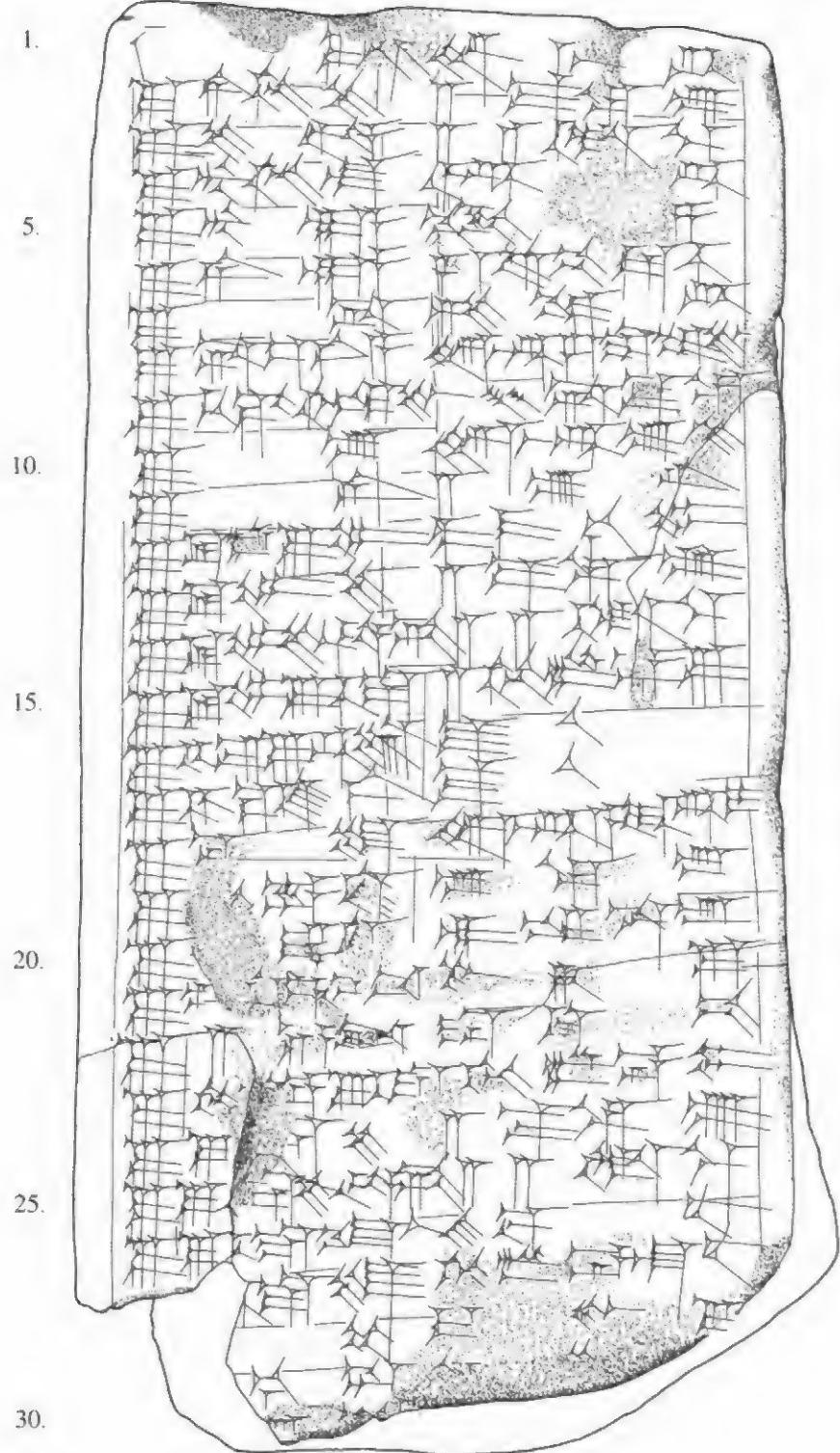


Plate 72

Text 55 Obverse

Col. i

Col. ii



Text 55 Reverse

Col. iv

Col. iii

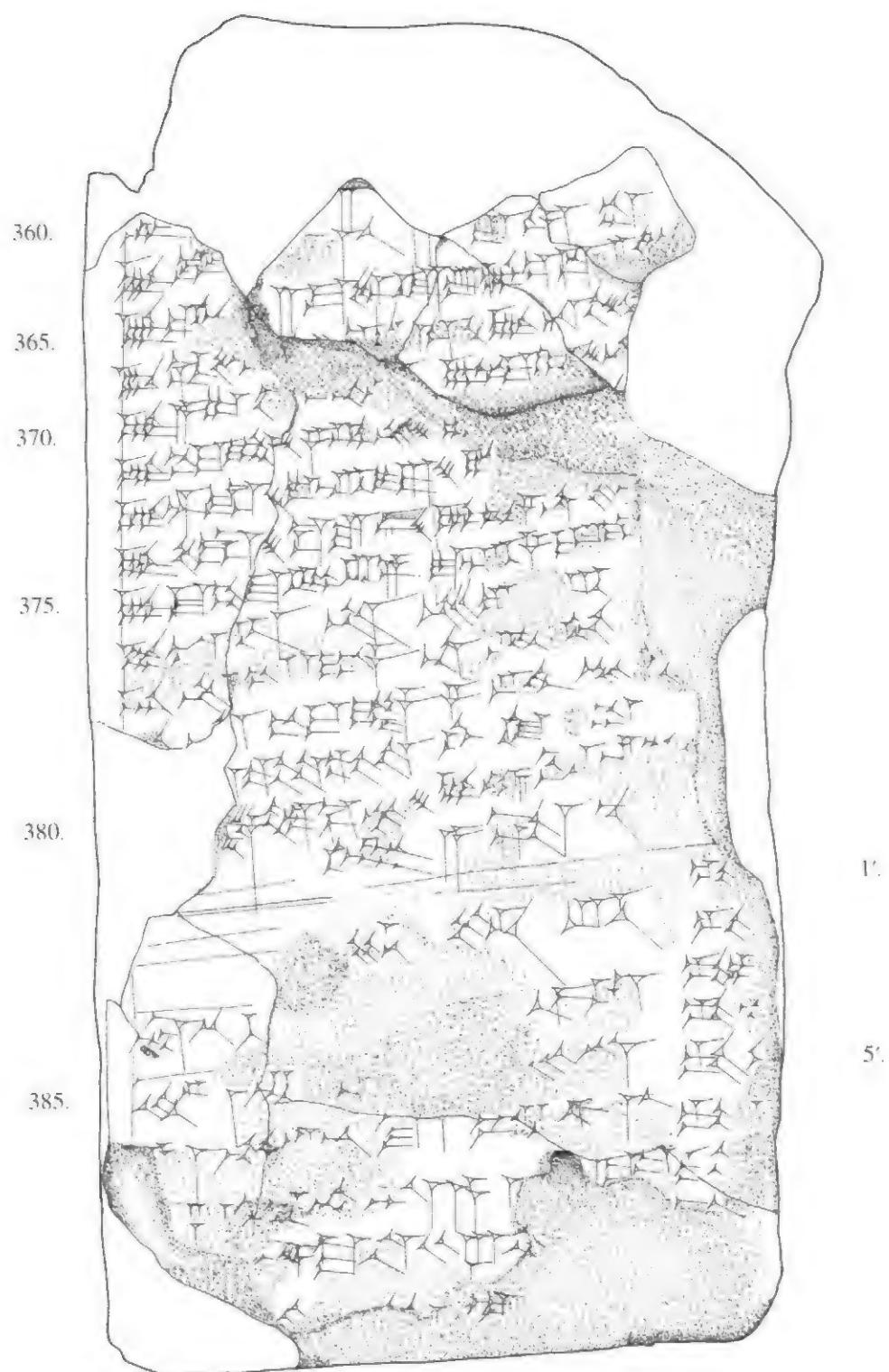


Plate 74

Text 56 Obverse



Text 56 Reverse

Col. v

Col. iv

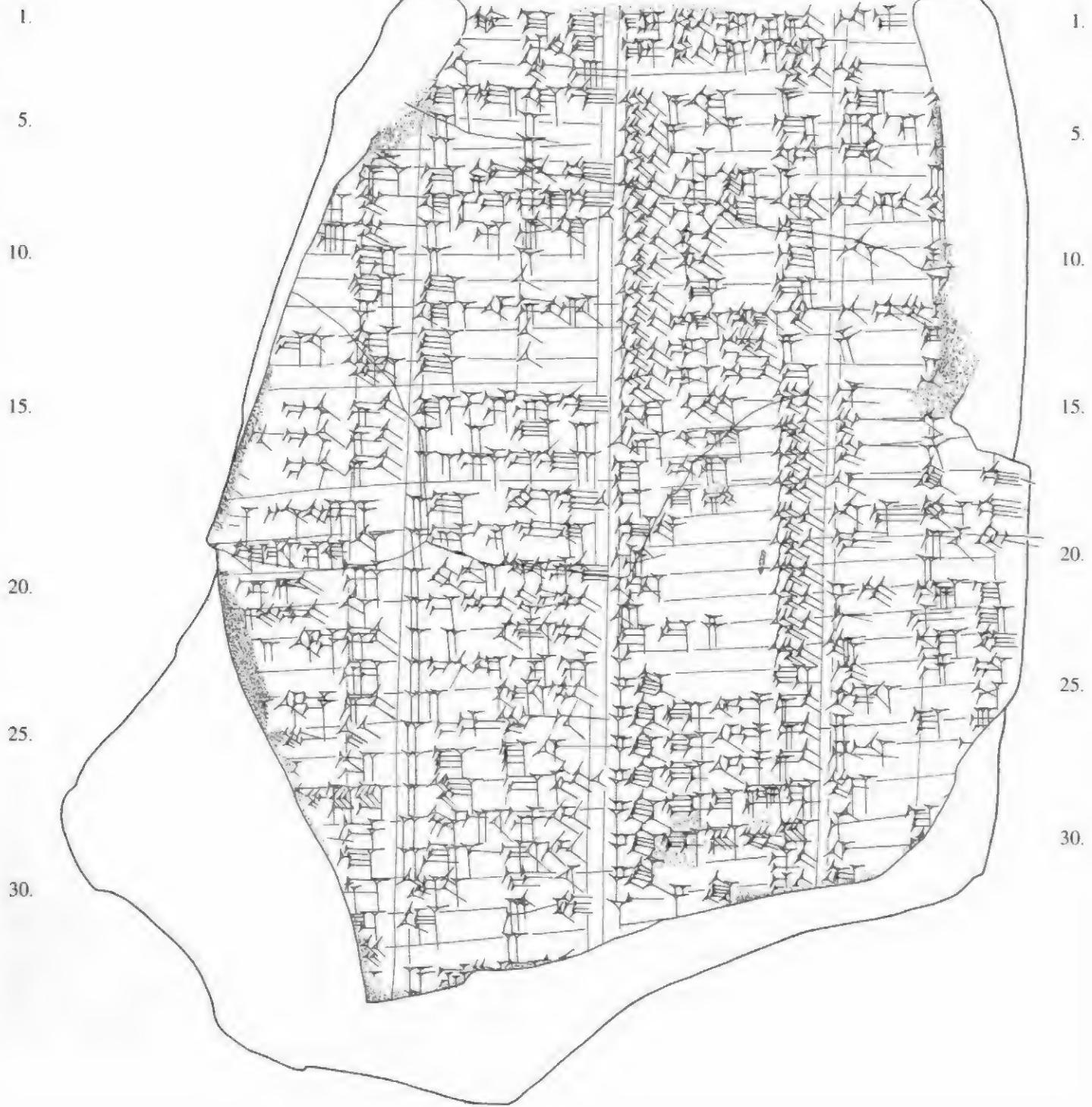
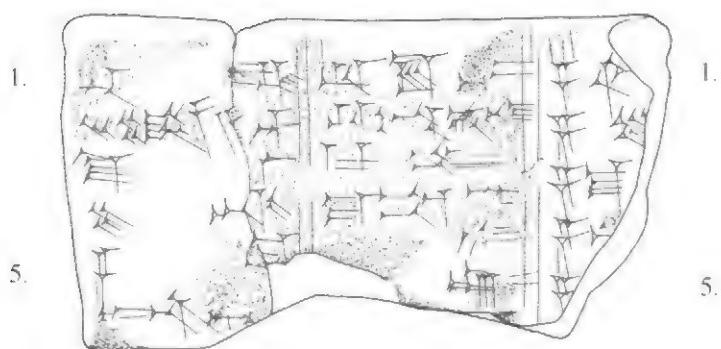


Plate 76

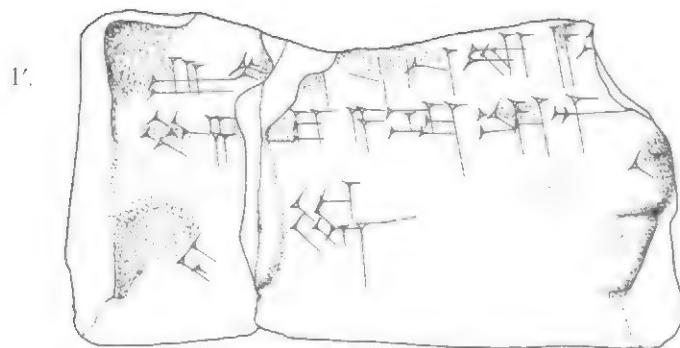
Text 57 Obverse (?)

Col. i

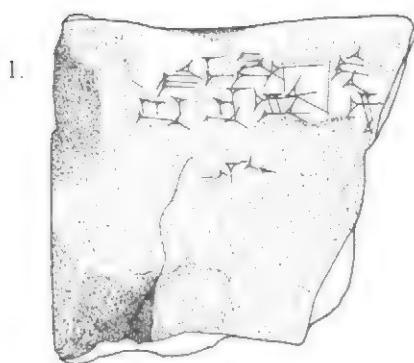
Col. ii



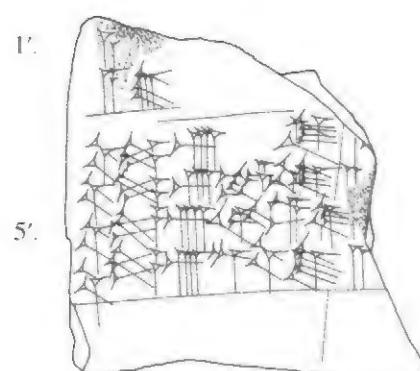
Text 57 Reverse (?)



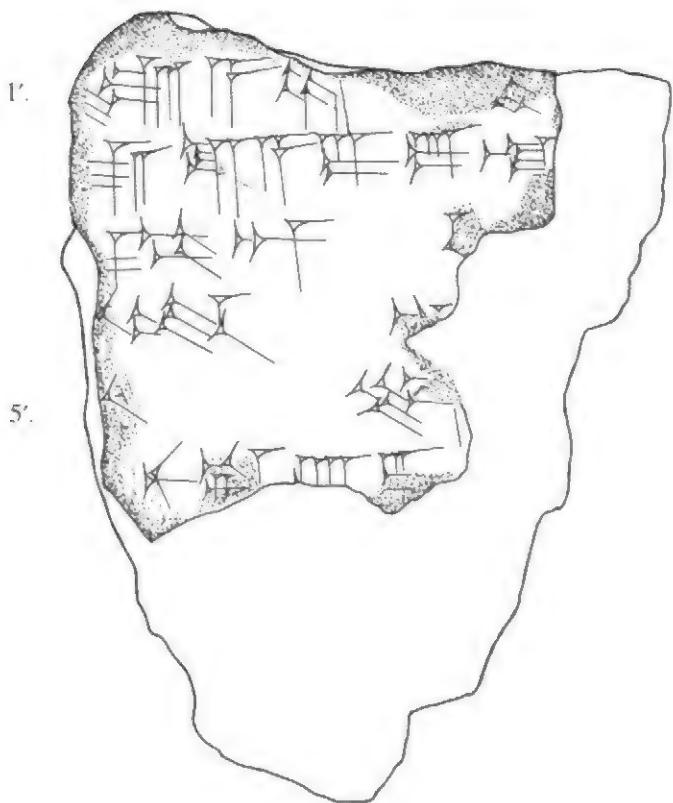
Text 58 Obverse



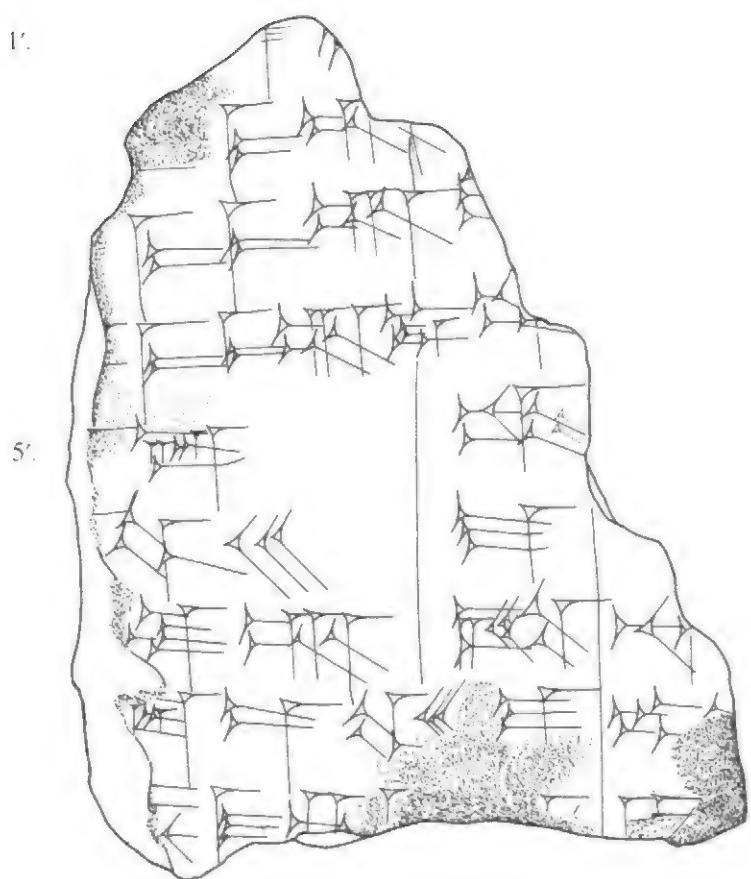
Text 58 Reverse



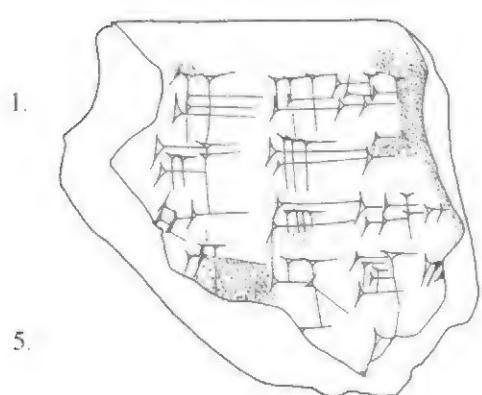
Text 59 Obverse



Text 59 Reverse



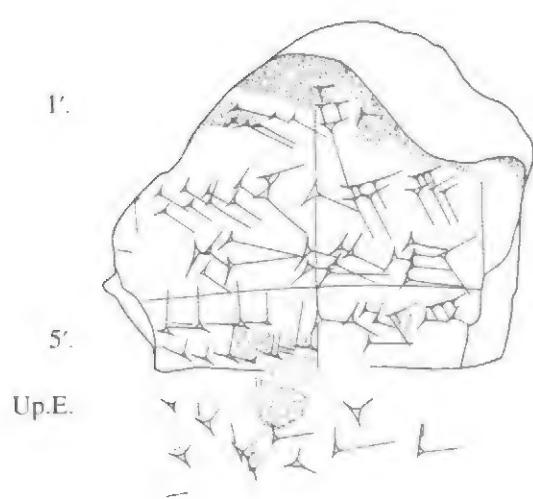
Text 60 Obverse(?)



Text 60 Reverse(?)

Col. i

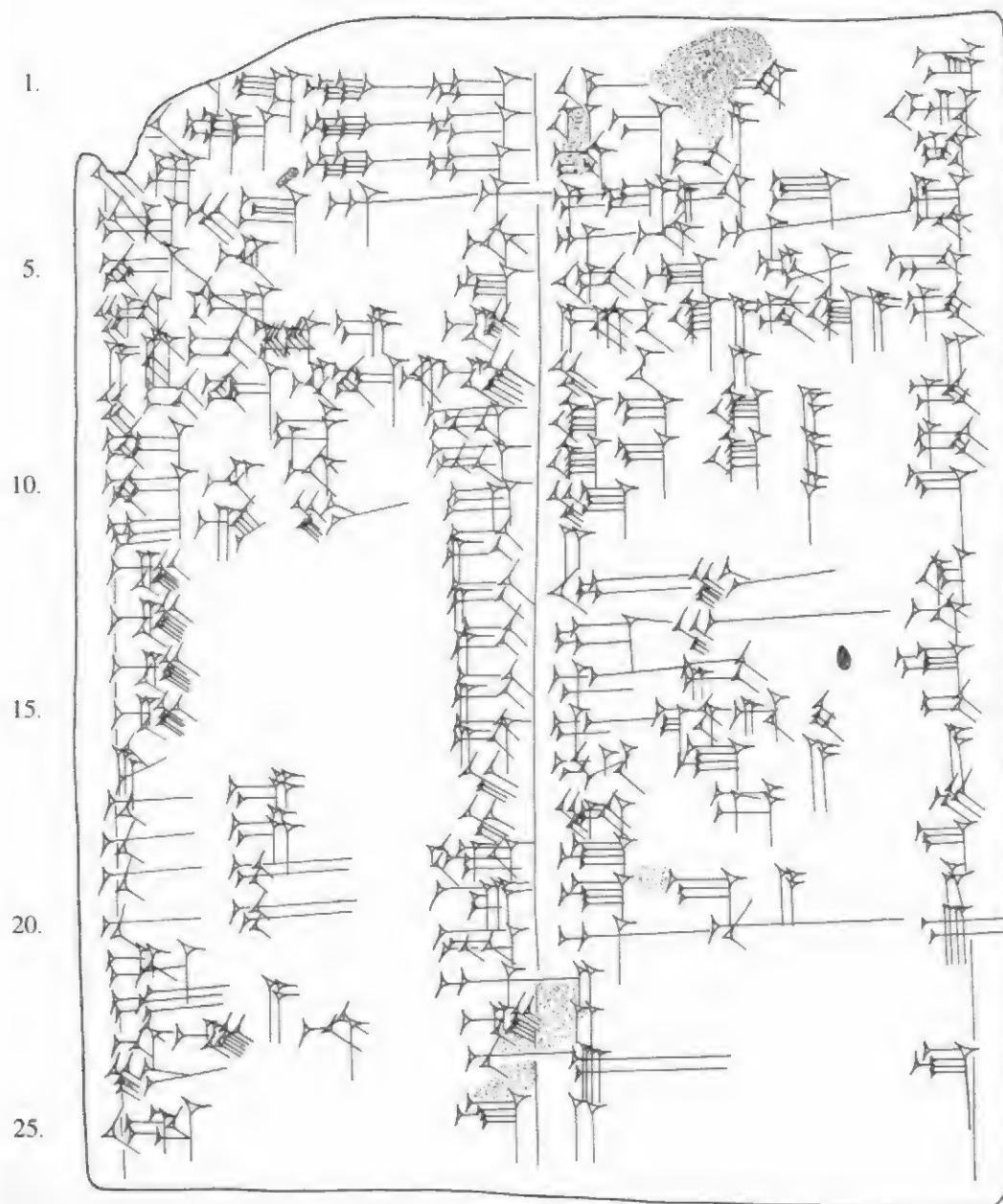
Col. ii



Text 61 Obverse

Col. i

Col. ii



Text 61 Reverse

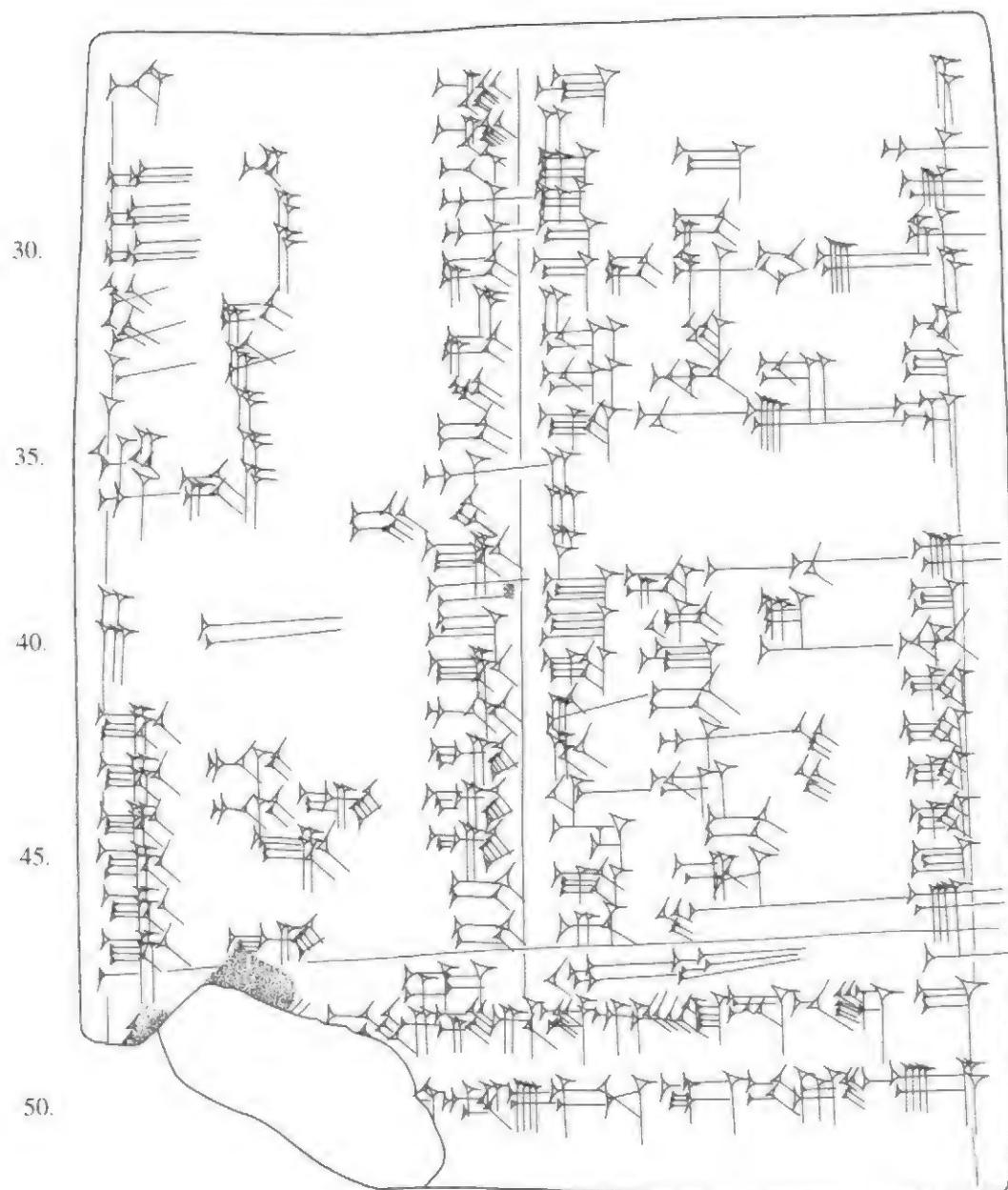
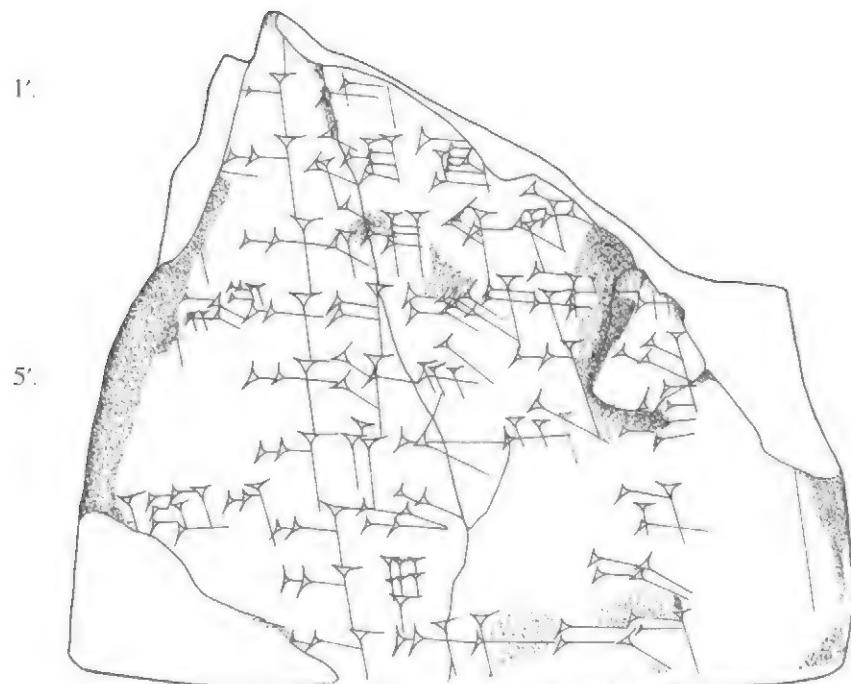


Plate 80

Text 62

Left Col.

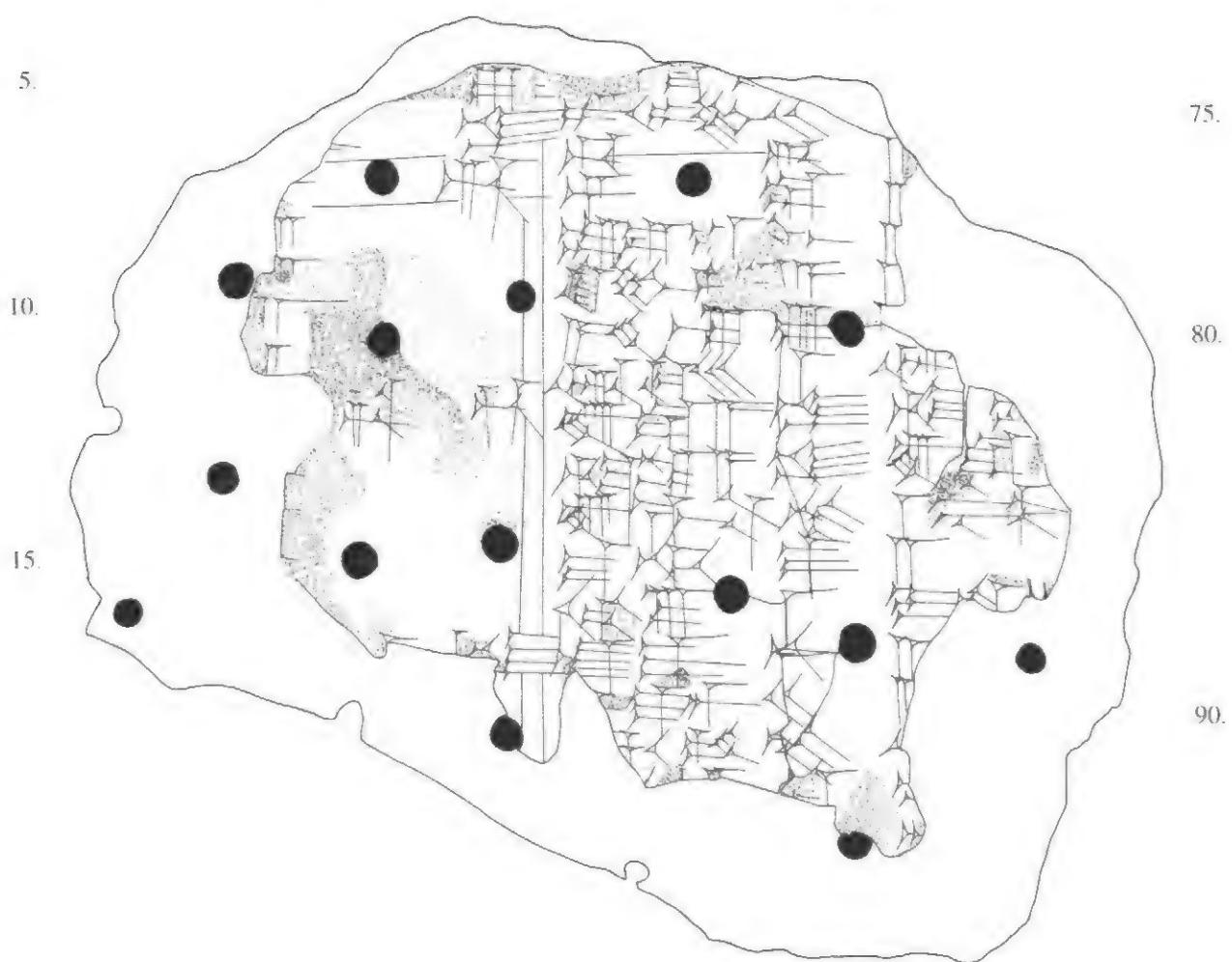
Right Col.



Text 63 (Frg. A) Obverse

Col. i

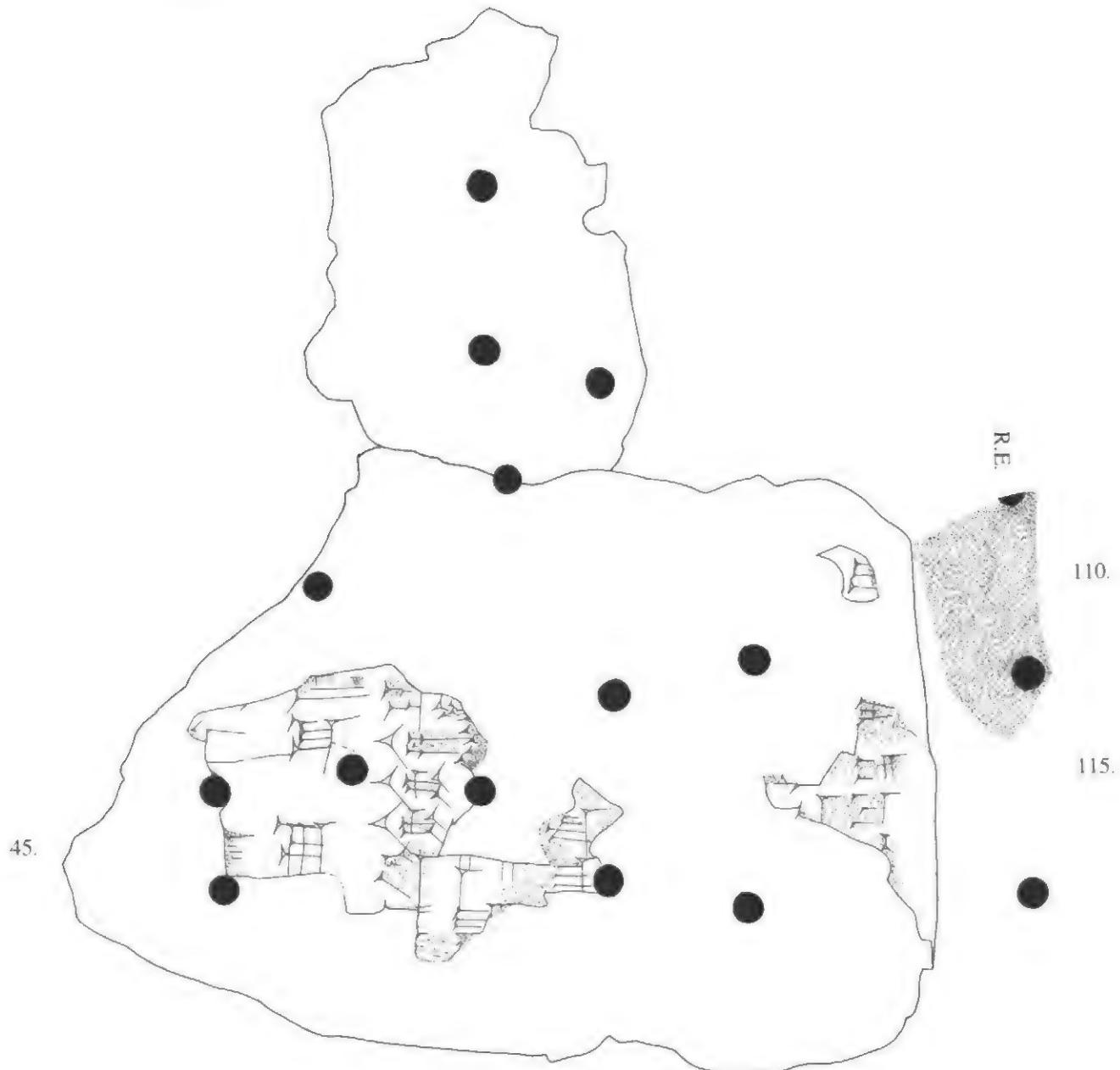
Col. ii



Text 63 (Frg. B + C) Obverse

Col. i

Col. ii



Text 63 (Frg. B) Reverse

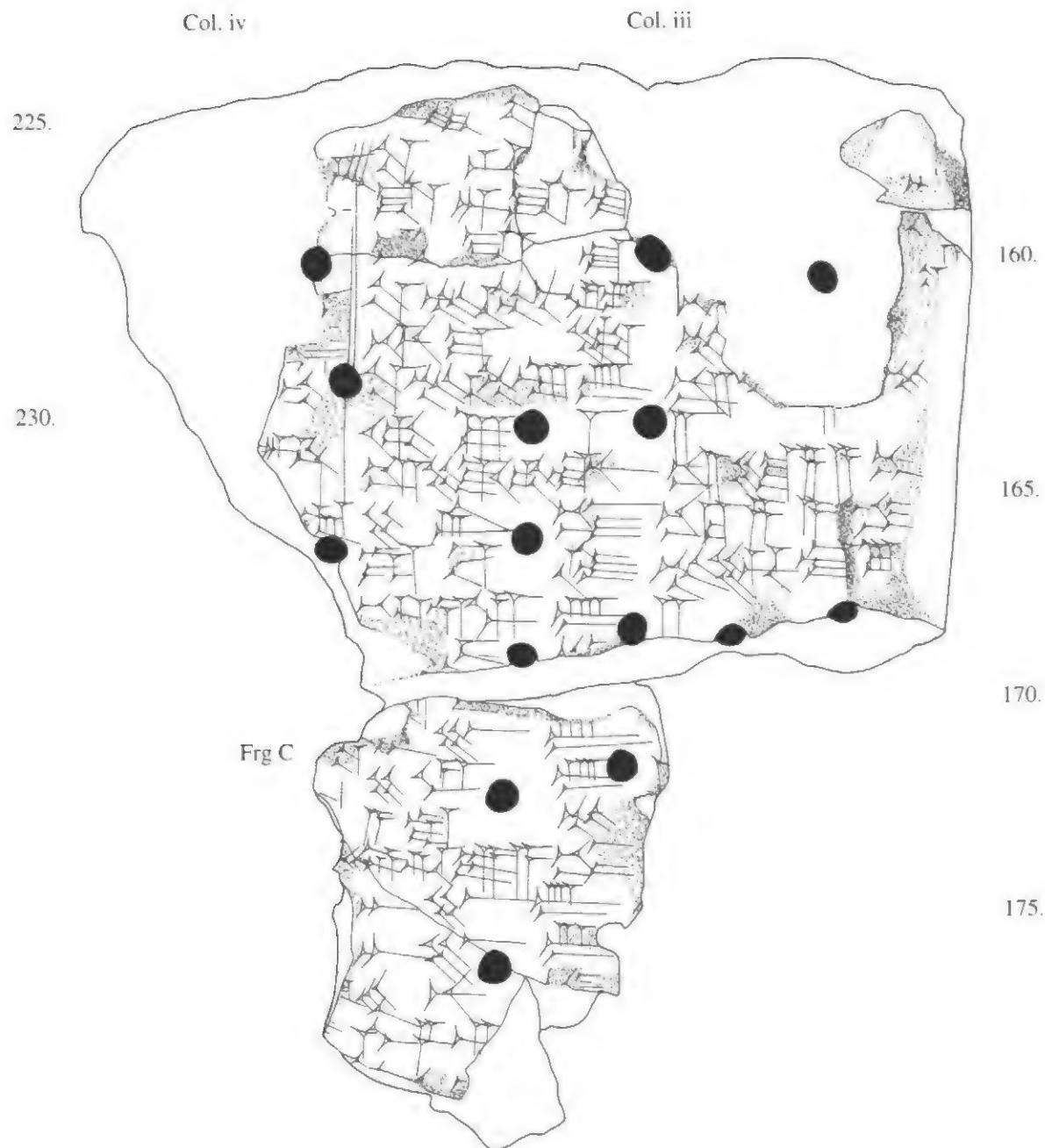
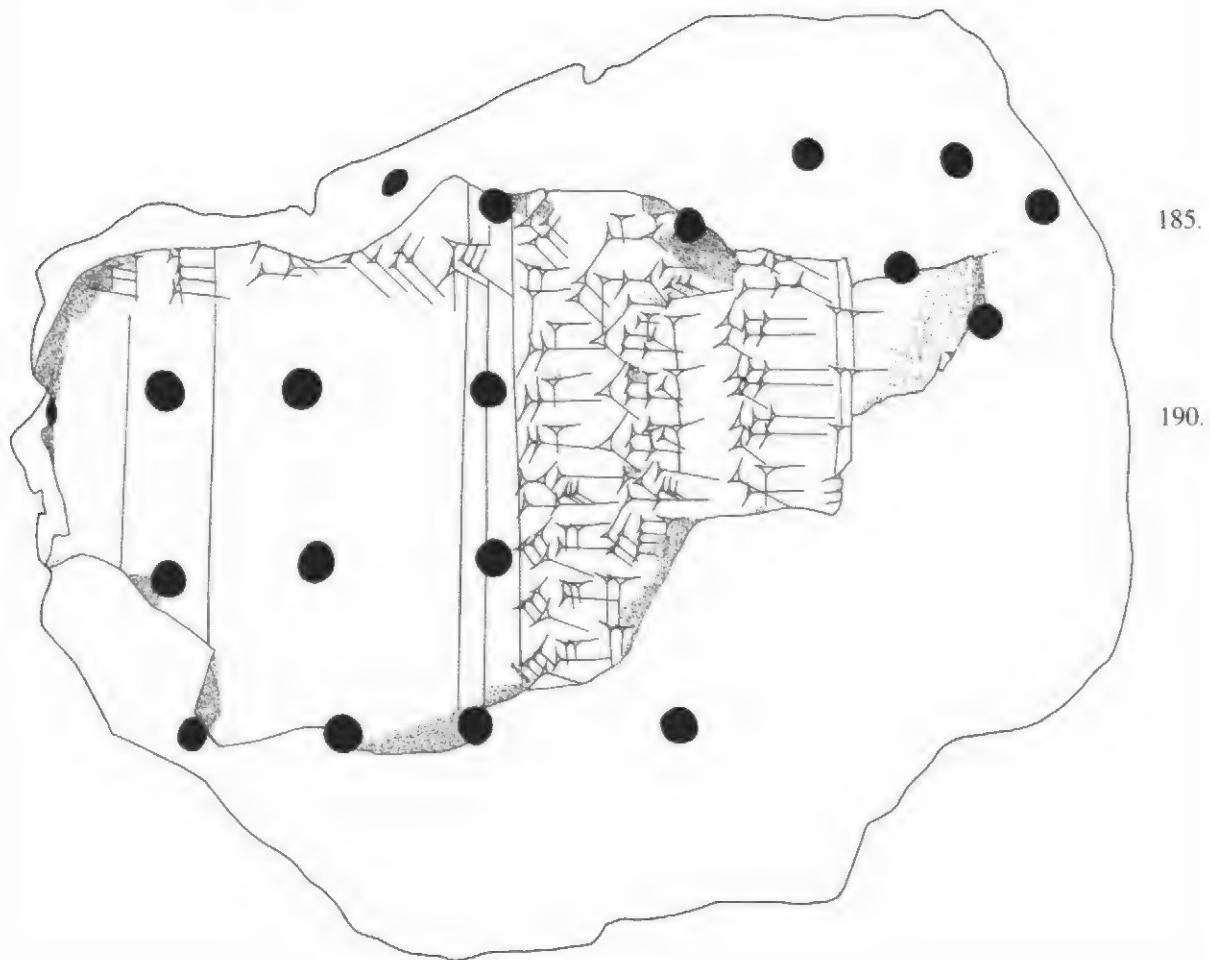


Plate 84

Text 63 (Frg. A) Reverse

Col. iv

Col. iii

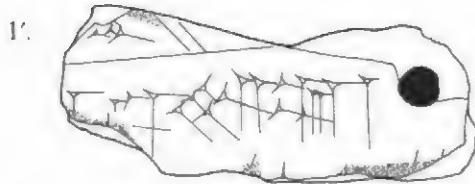


185.

190.

Text 63 (Frg. D) Reverse

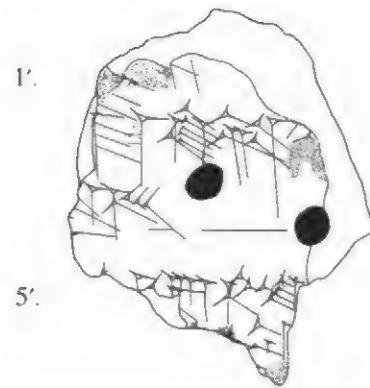
Col. iv



1'.

Text 63 (Frg. E) Reverse

Col. iv

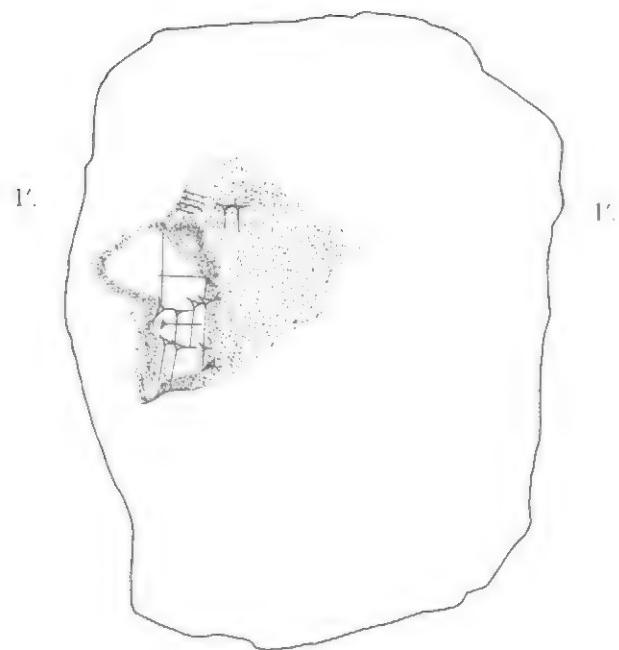


5'.

Text 64 Obverse

Sub-col. i

Sub-col. ii



Text 64 Reverse

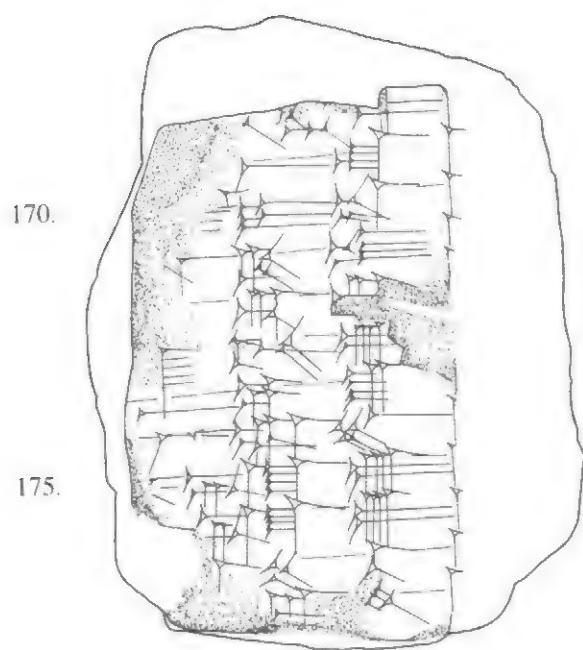


Plate 86

Text 65 Obverse



Text 65 Reverse

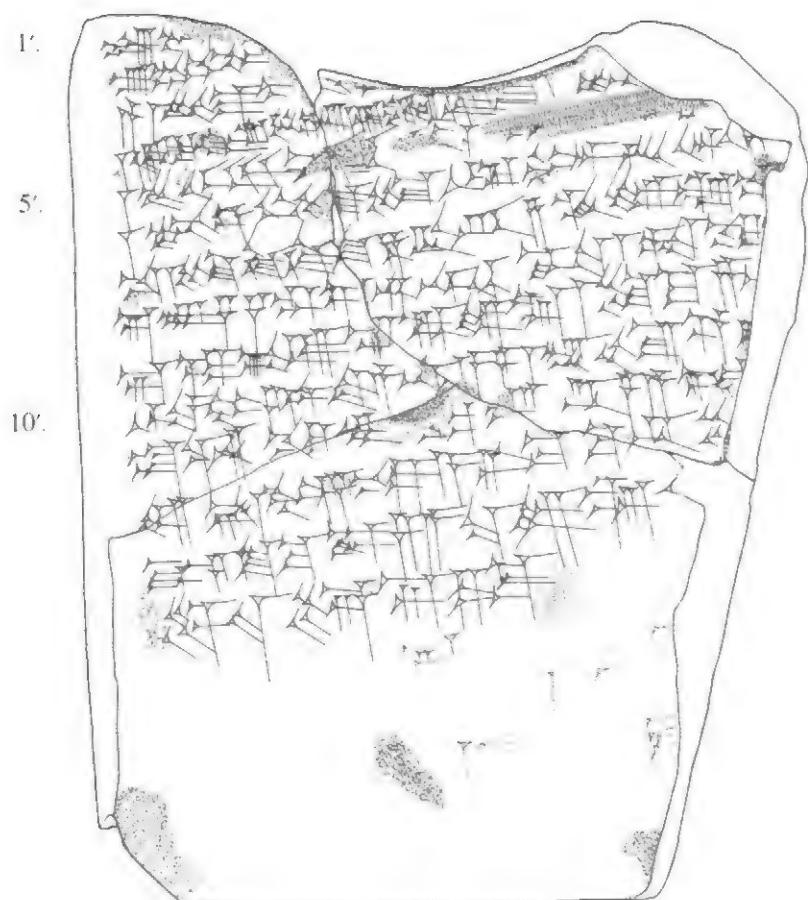
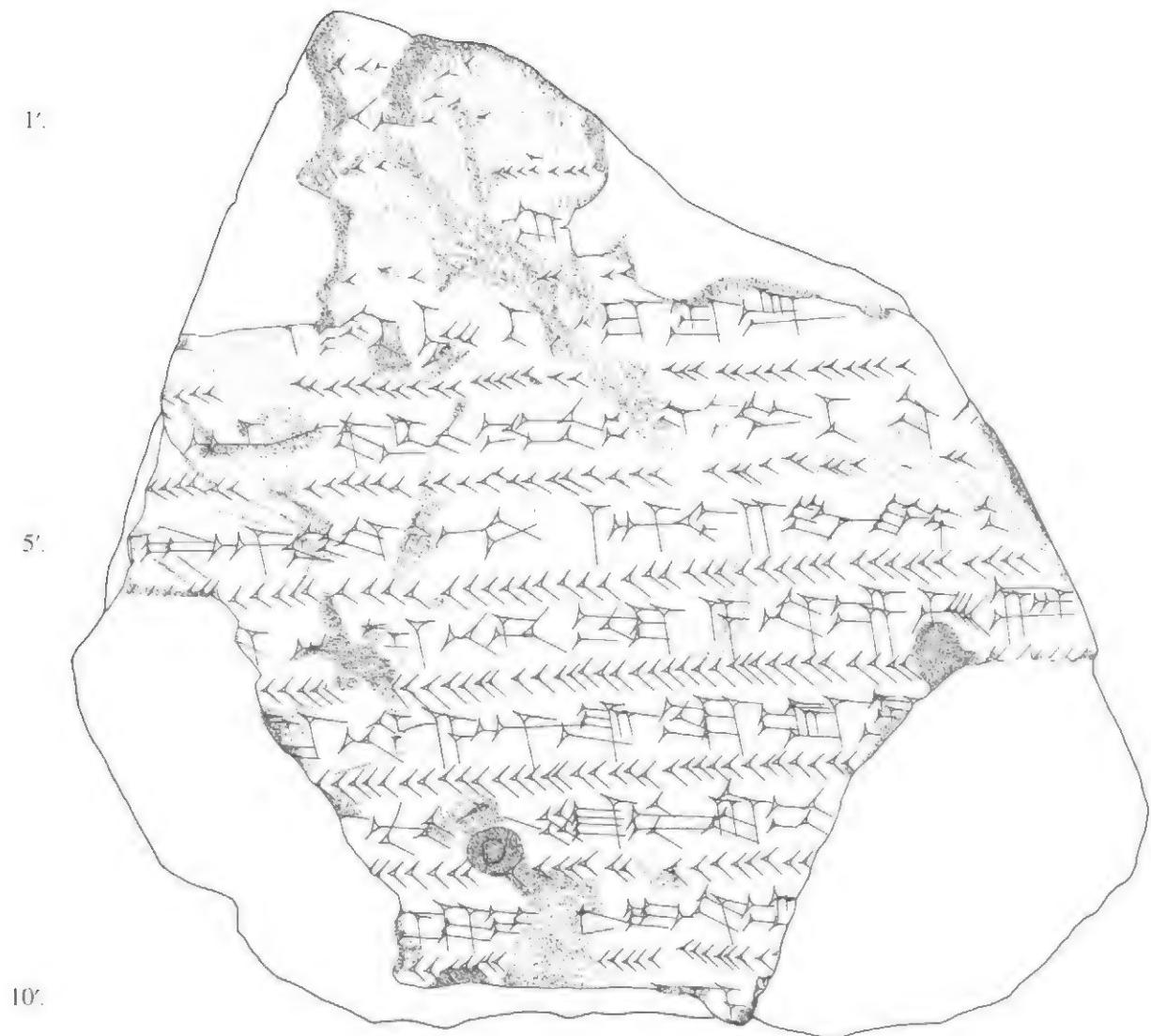


Plate 88

Text 66



Text 67

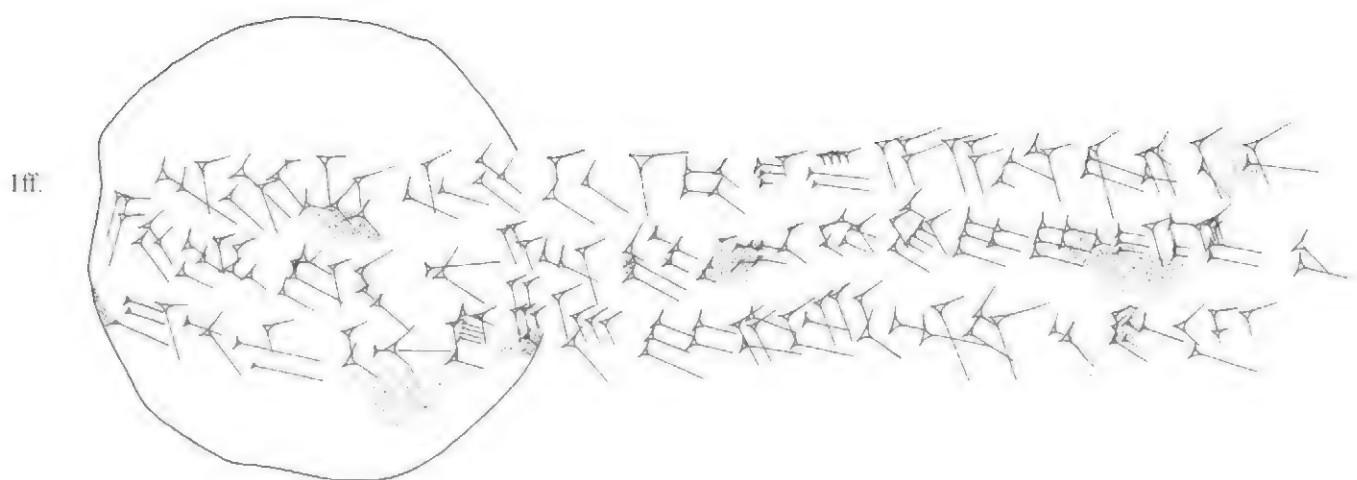
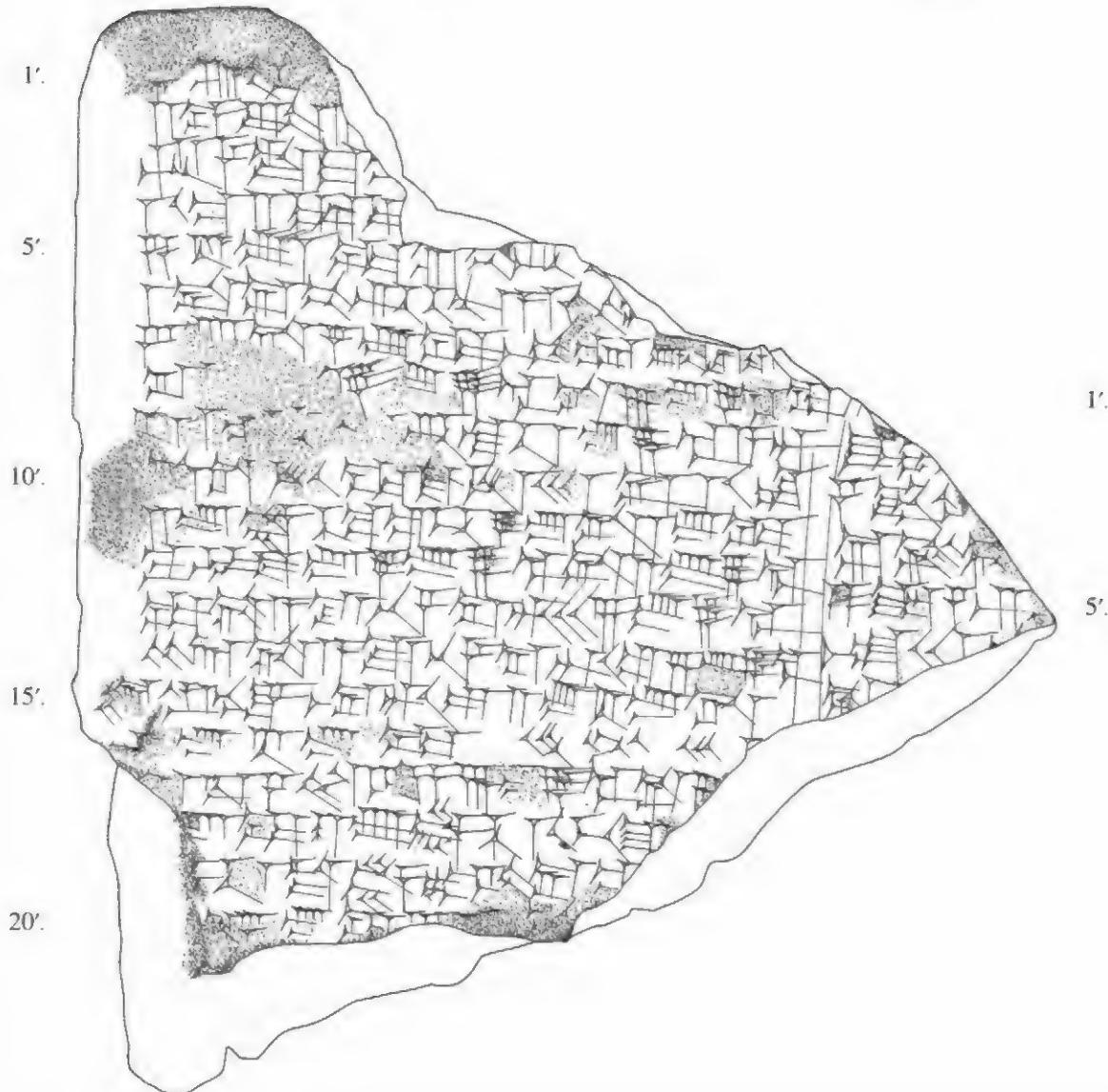


Plate 90

Text 68 Obverse

Col. i

Col. ii



Text 68 Reverse

Col. iv

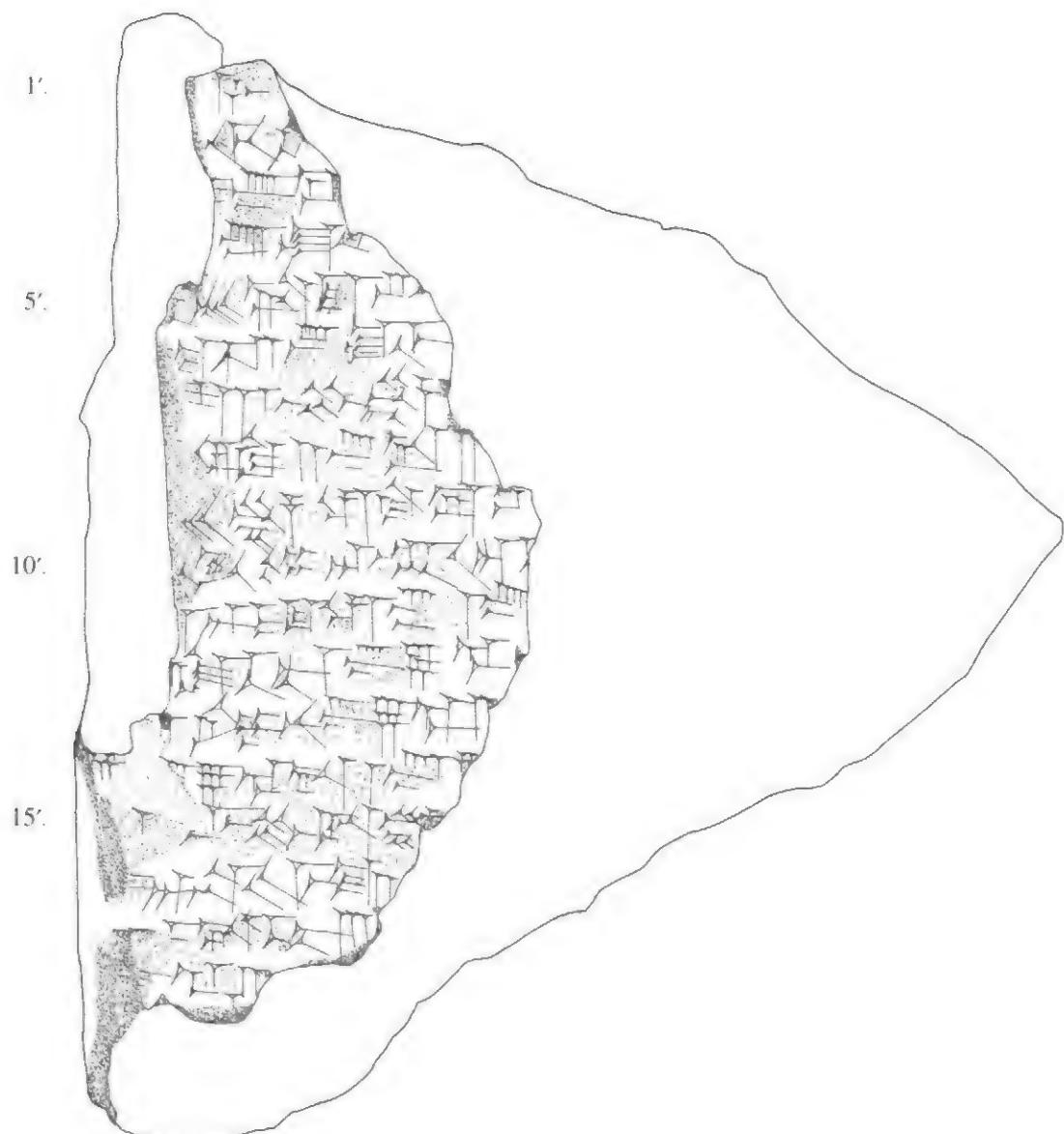
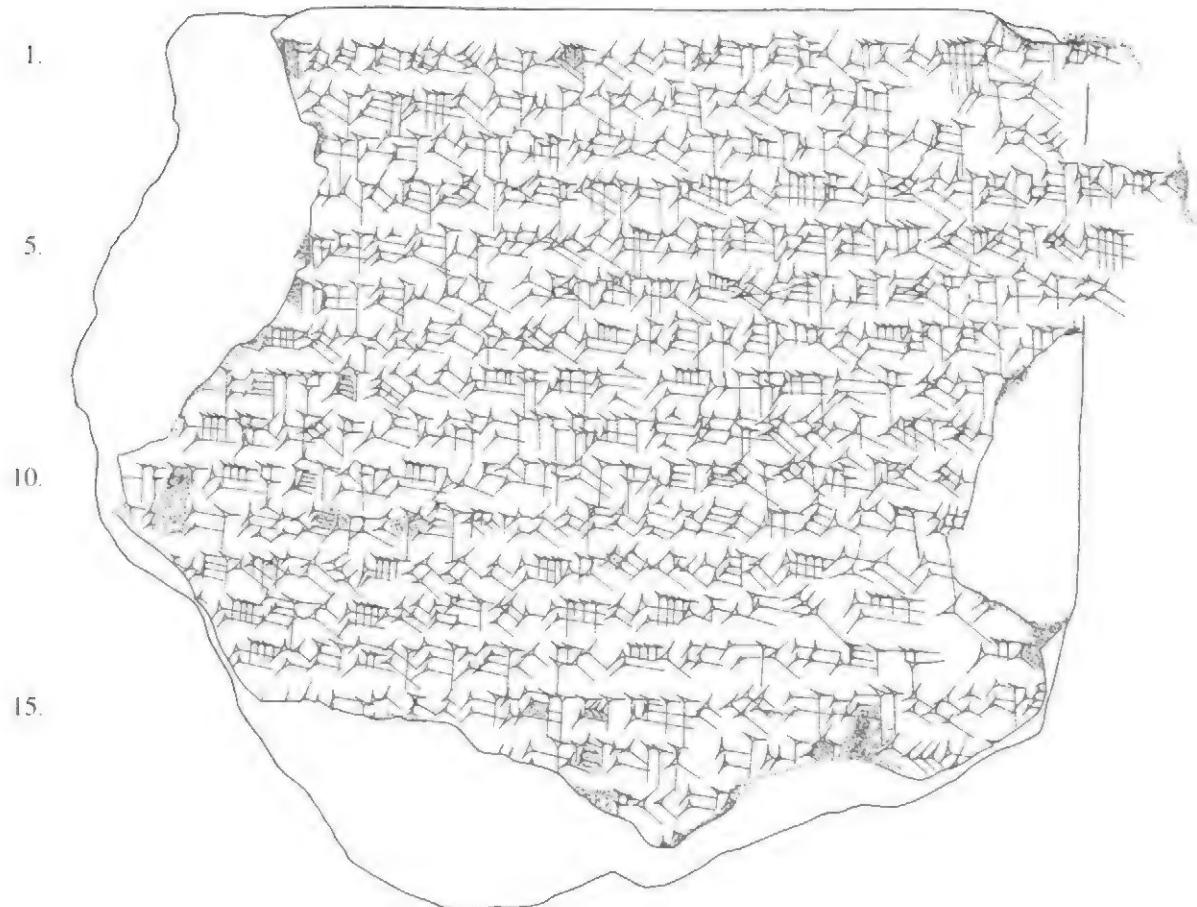


Plate 92

Text 69 Obverse



Text 69 Reverse

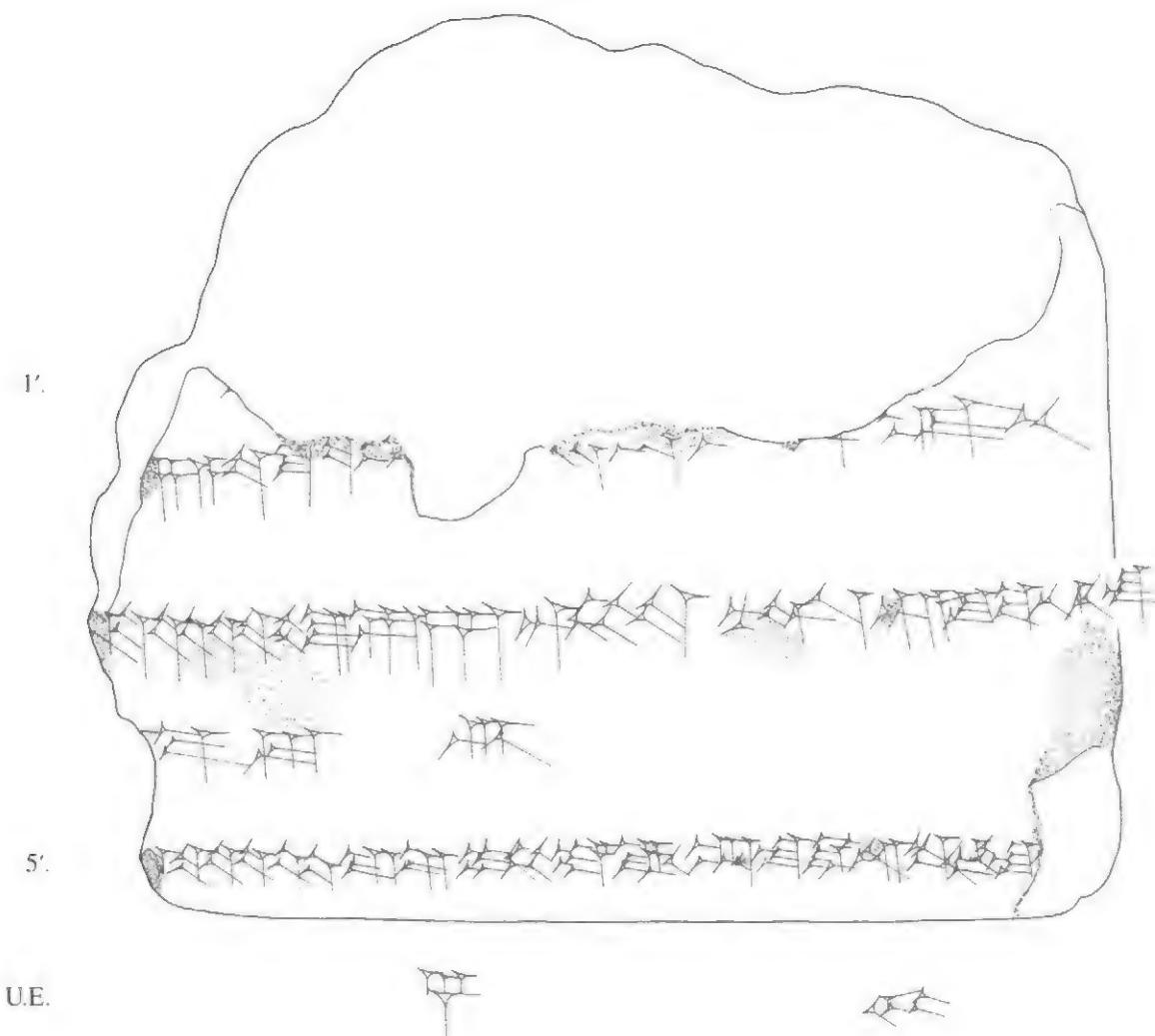
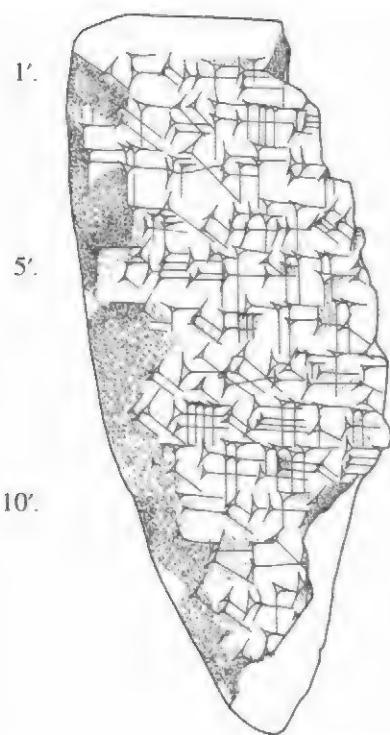
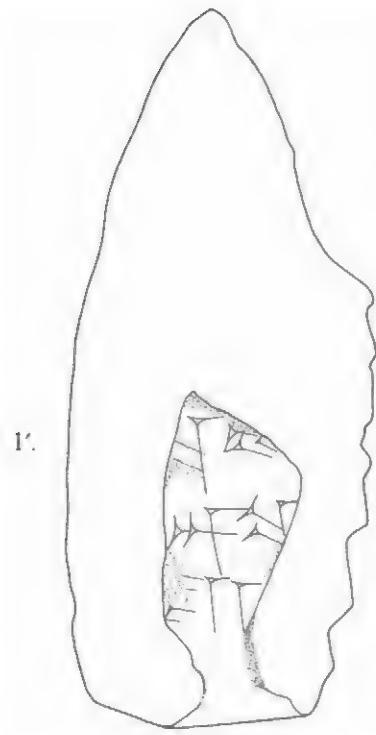


Plate 94

Text 70 Obverse



Text 70 Reverse

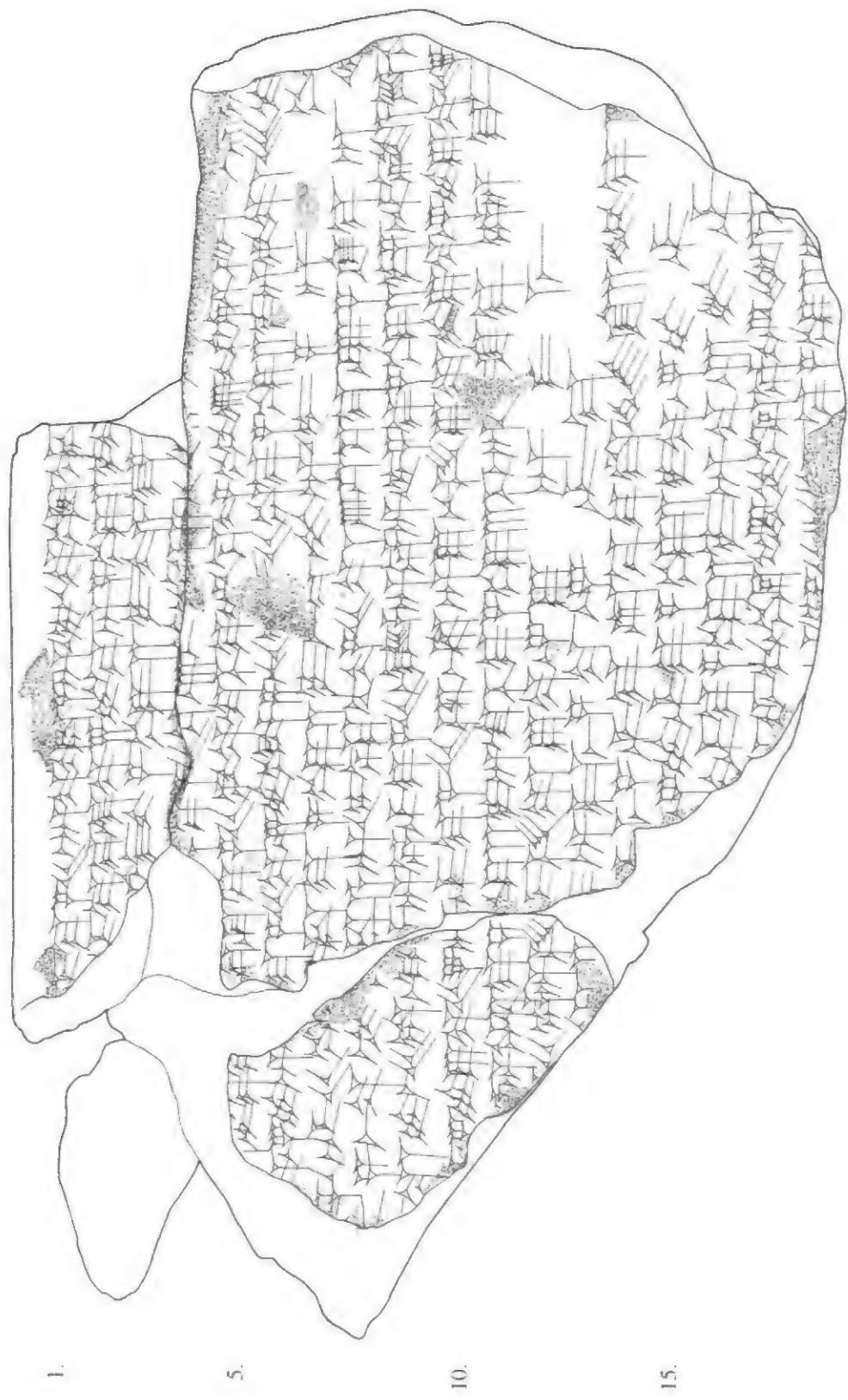


Text 71 Obverse

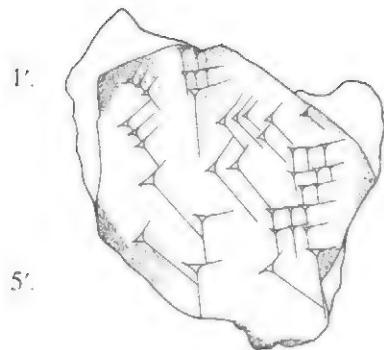


Plate 96

Text 71 Reverse



Text 72



Text 73

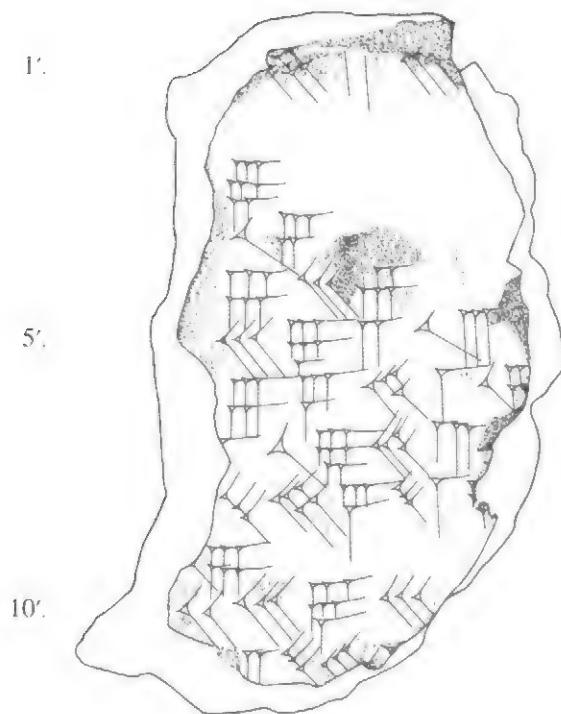
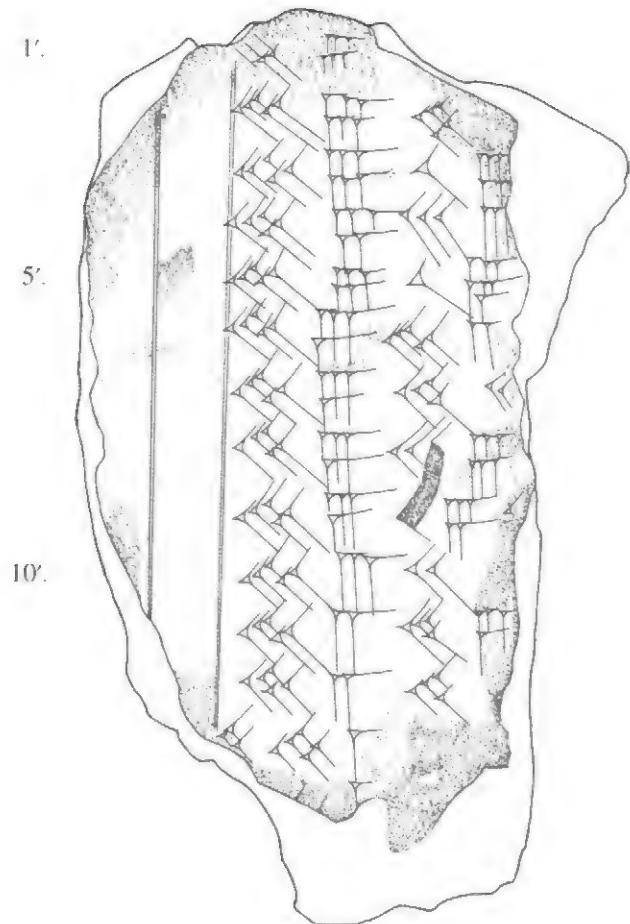
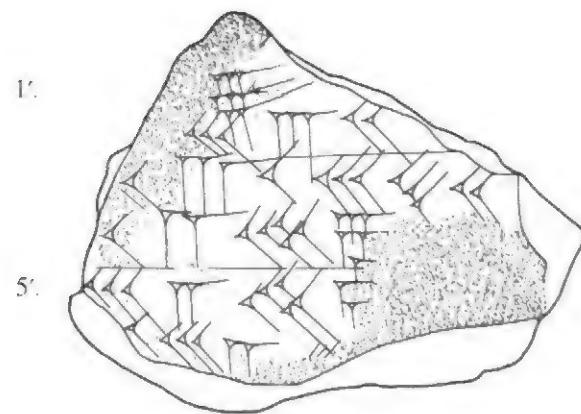


Plate 98

Text 74



Text 75 Obverse



Text 76 Obverse(?)

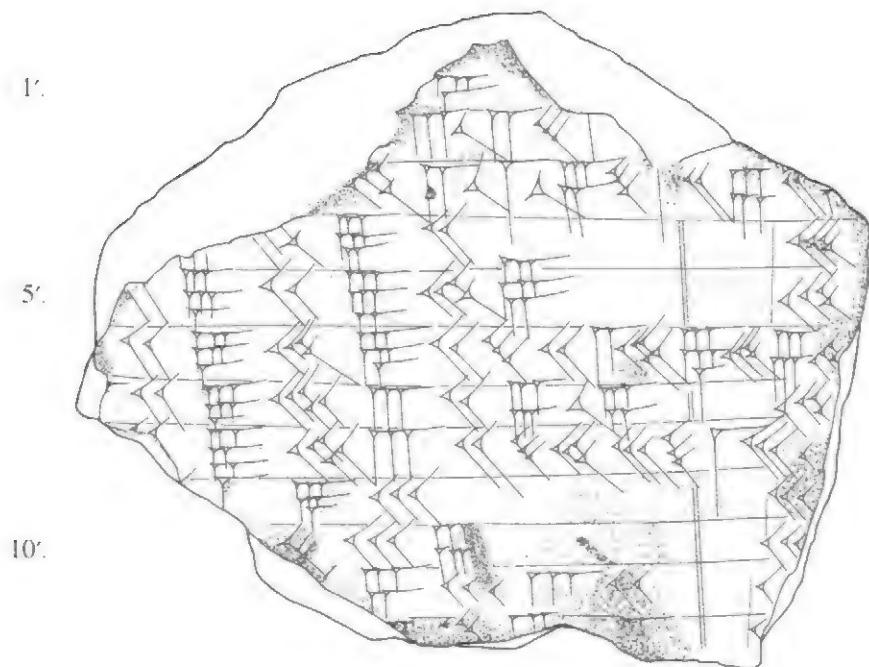
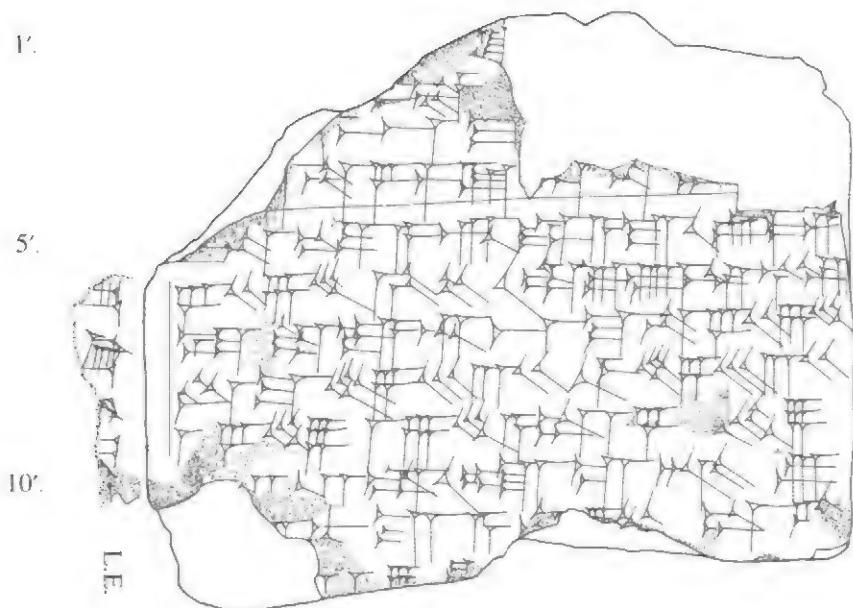
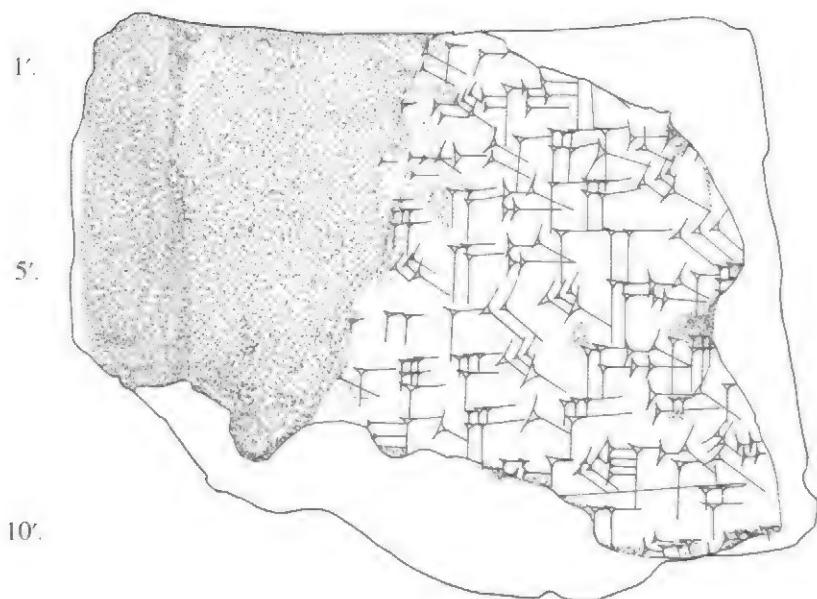


Plate 100

Text 77 Obverse(?)



Text 77 Reverse(?)



Text 78

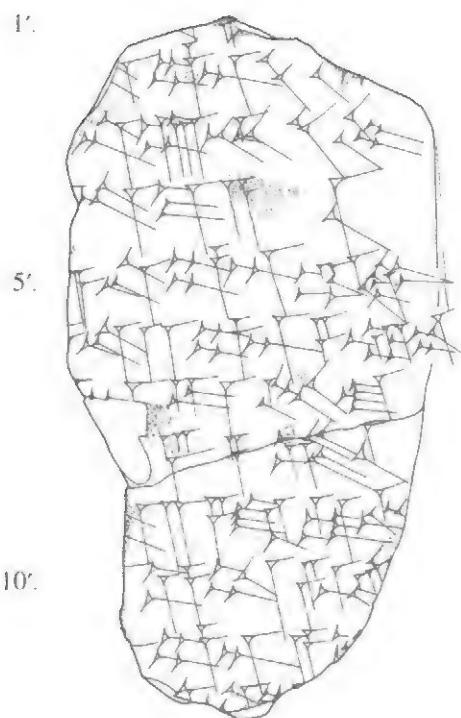


Plate 102

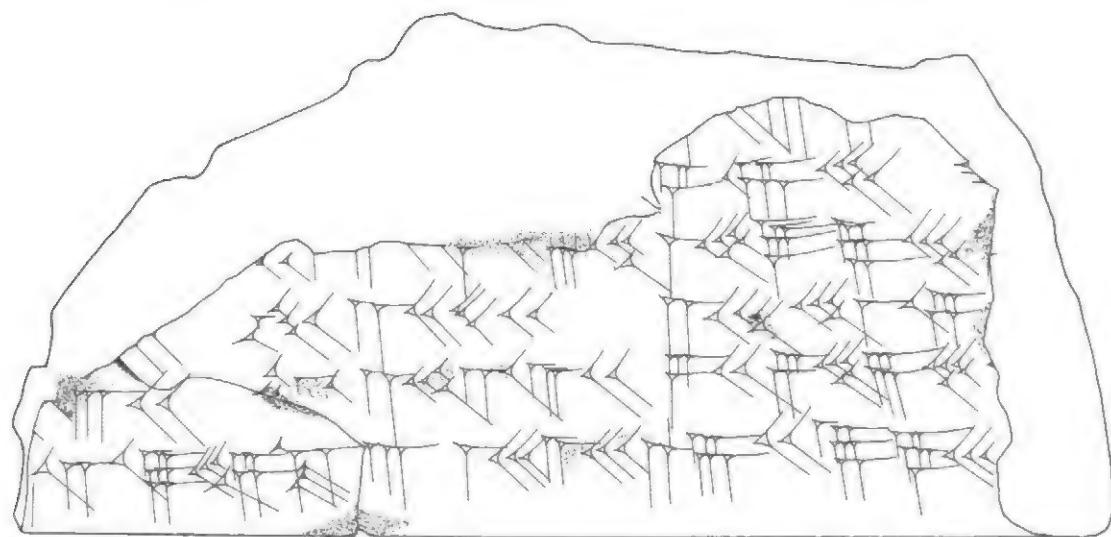
Text 79 Obverse

Col. i

Col. ii

Col. iii

10.



Text 79 Reverse

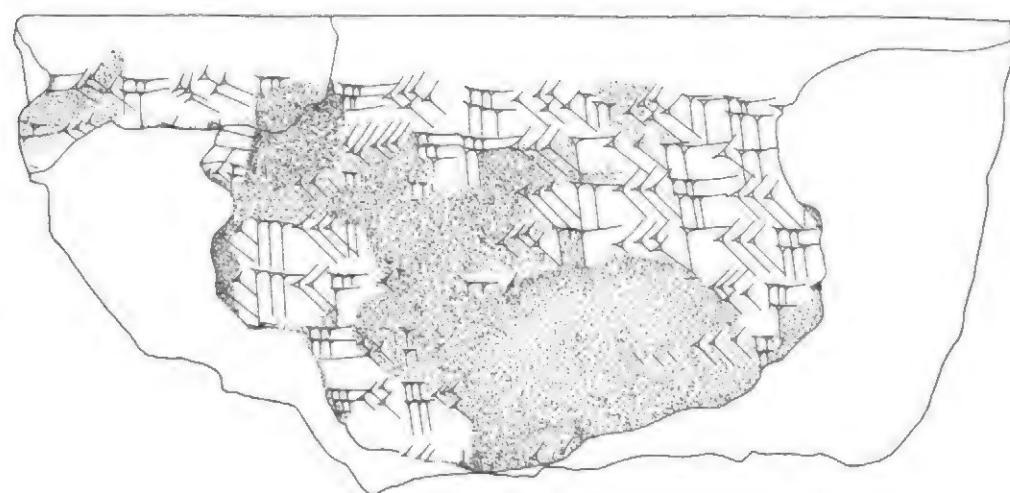
Col. i

Col. ii

Col. iii

1.

5.



Text 80 Obverse

Col. i

Col. ii



Text 80 Reverse

Col. i

Col. ii



Text 81 Obverse

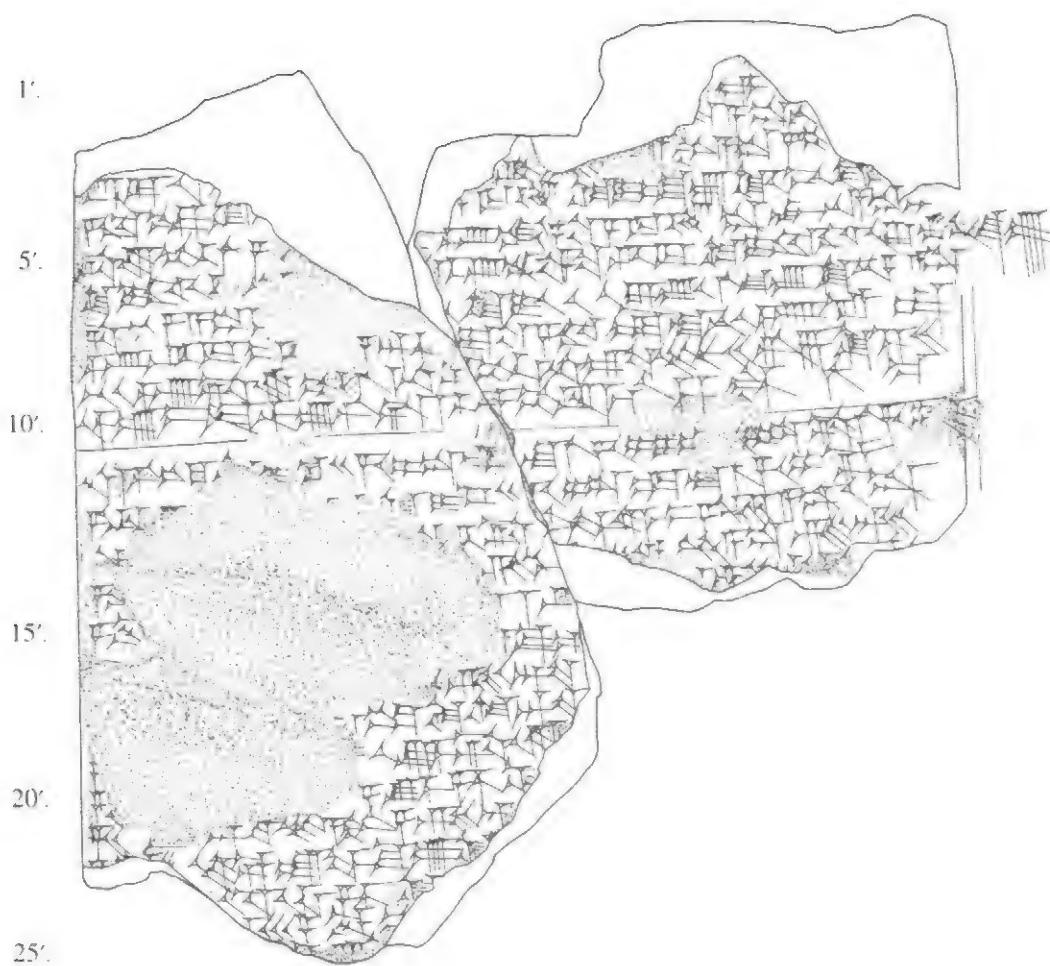


Plate 106

Text 81 Reverse



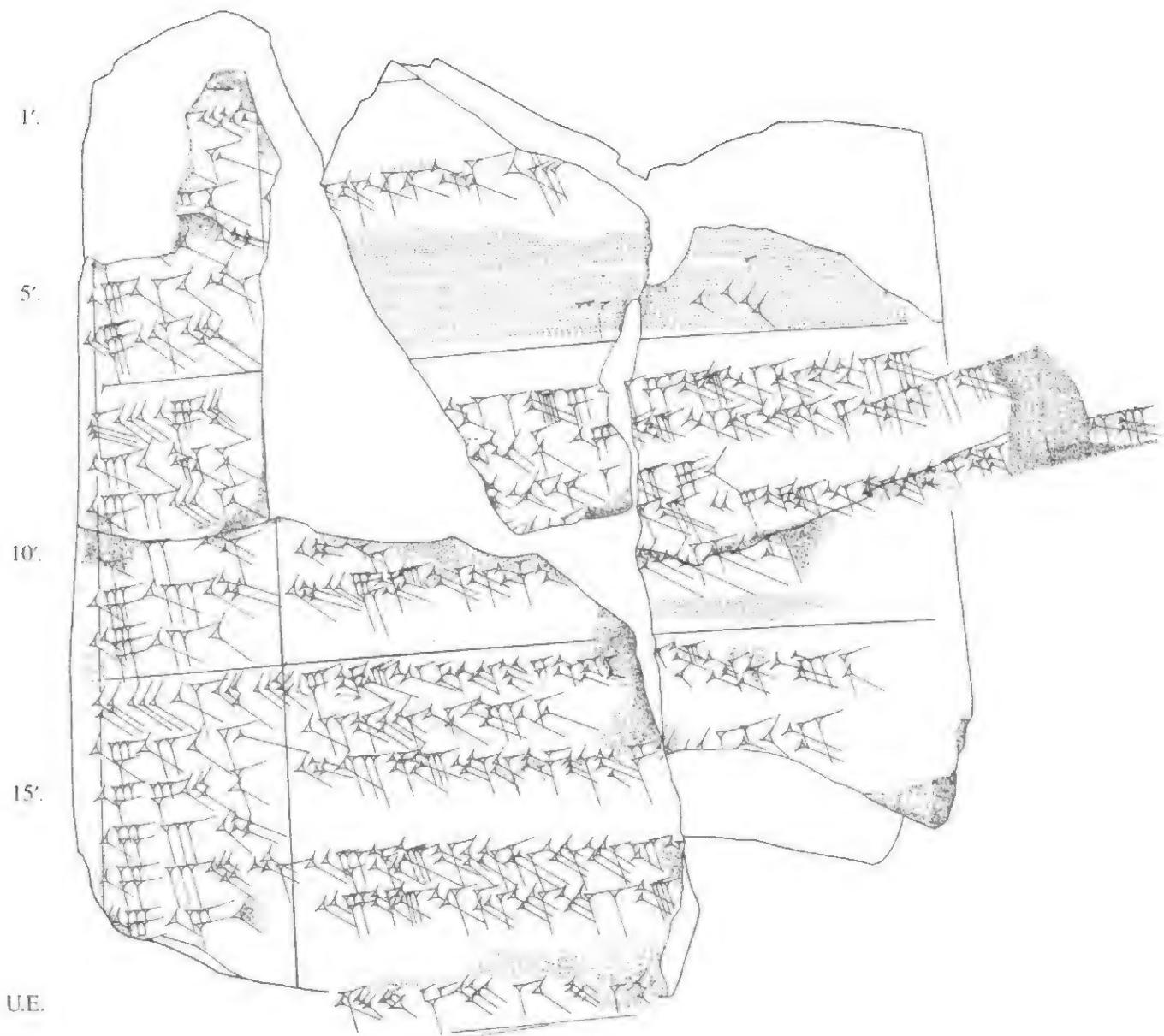
Text 82 Obverse



Scale: 75% of 3:2

Plate 108

Text 82 Reverse



Scale: 75% of 3:2

Text 83 Obverse

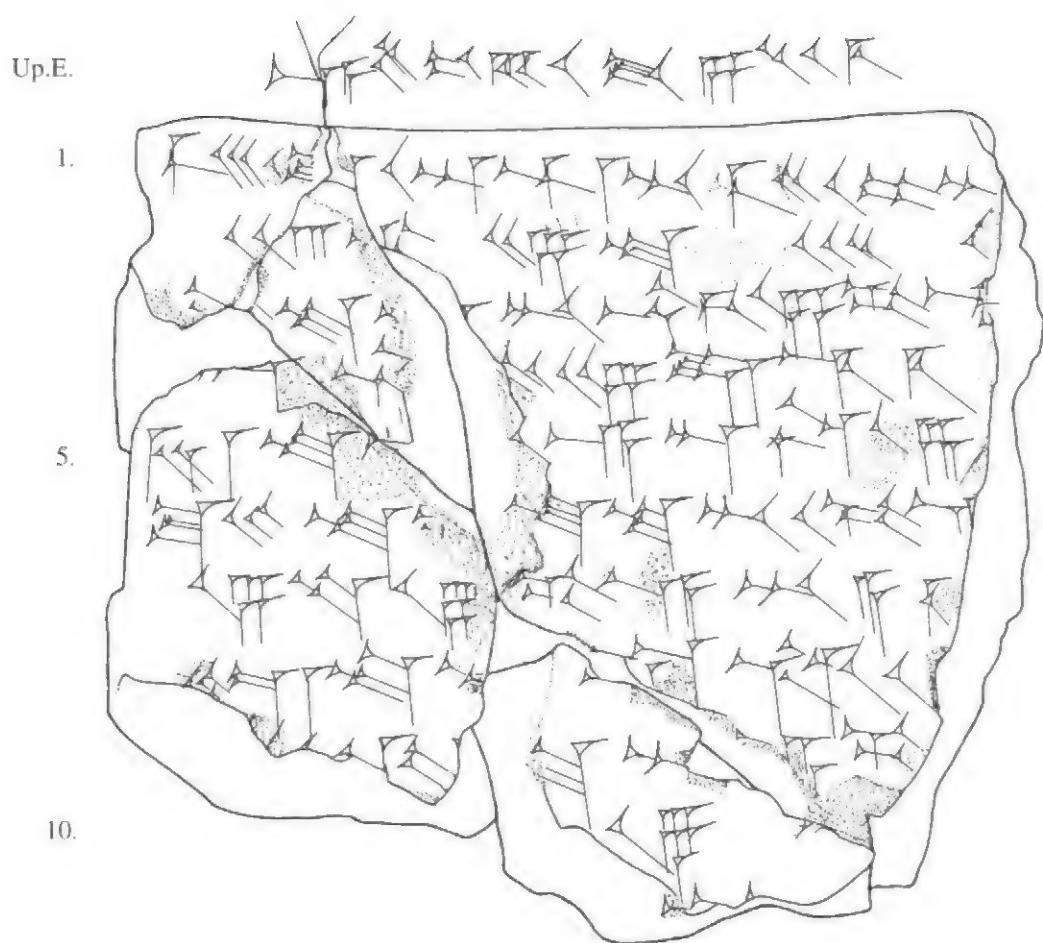


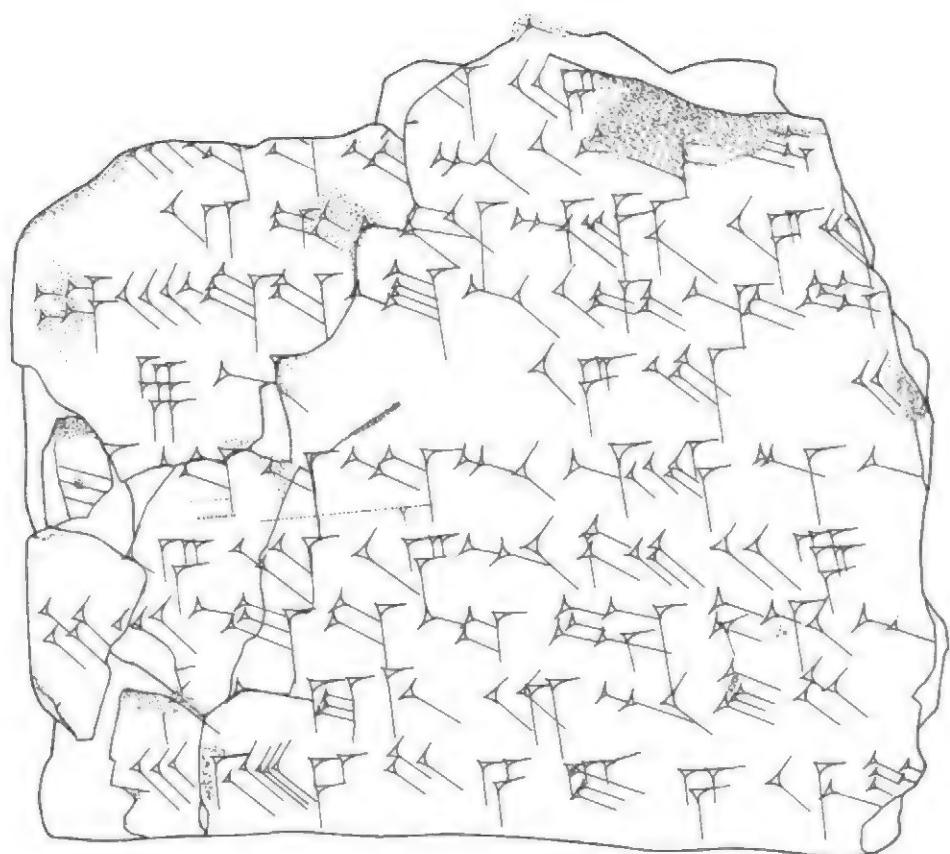
Plate 110

Text 83 Reverse

1.

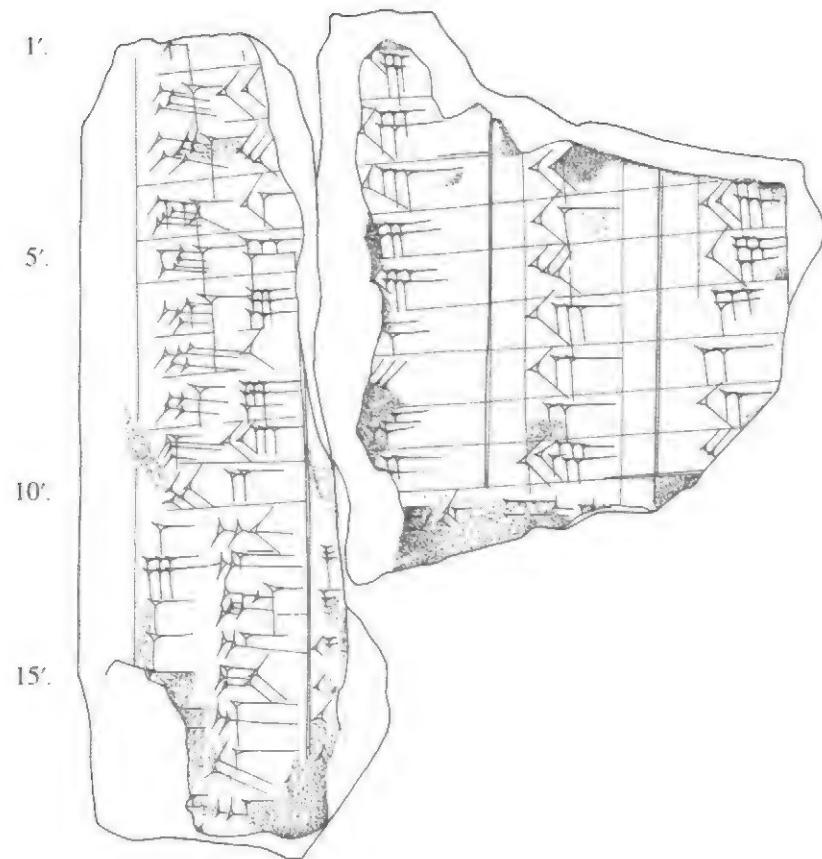
5.

10.



Text 84 Obverse(?)

Plate 111



Text 84 Reverse(?)

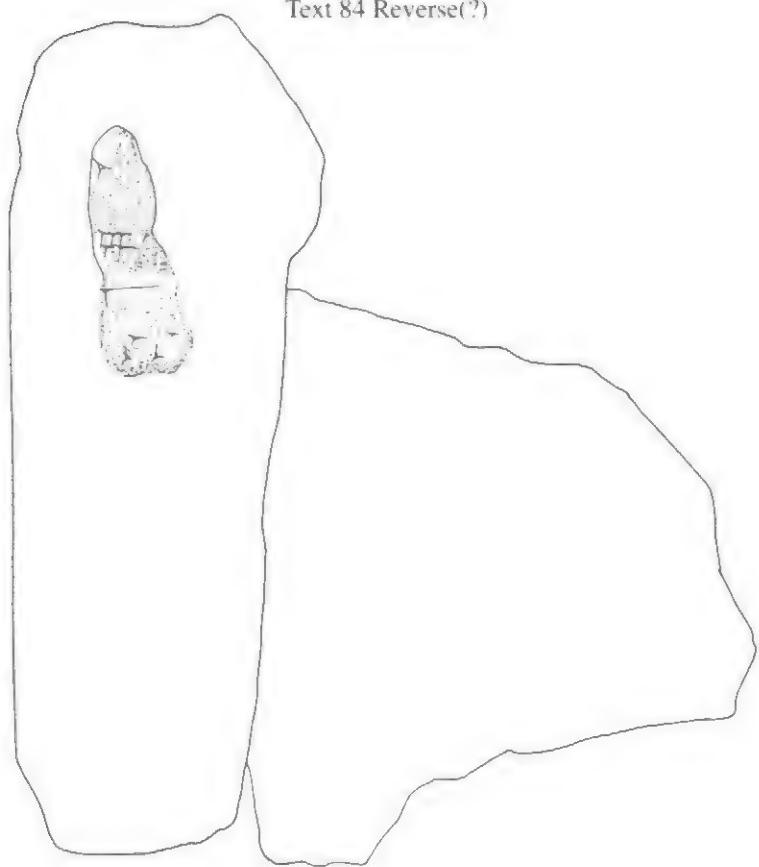
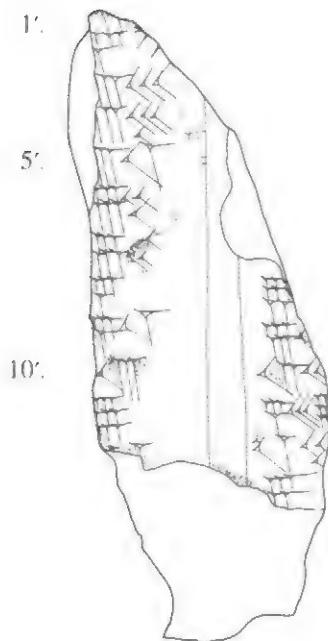
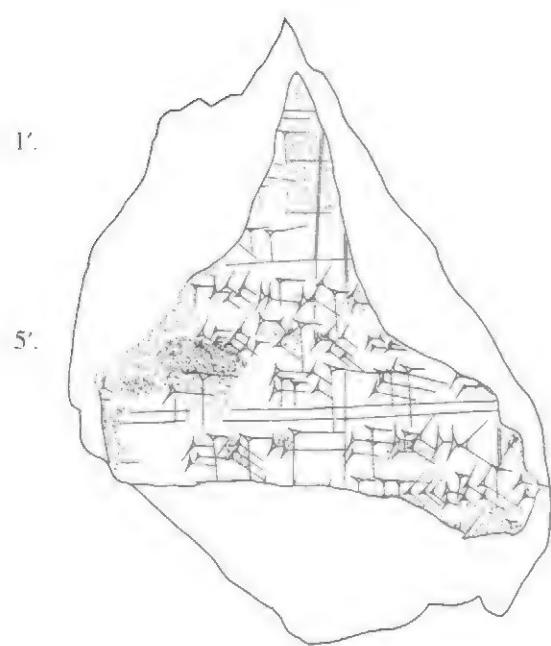


Plate 112

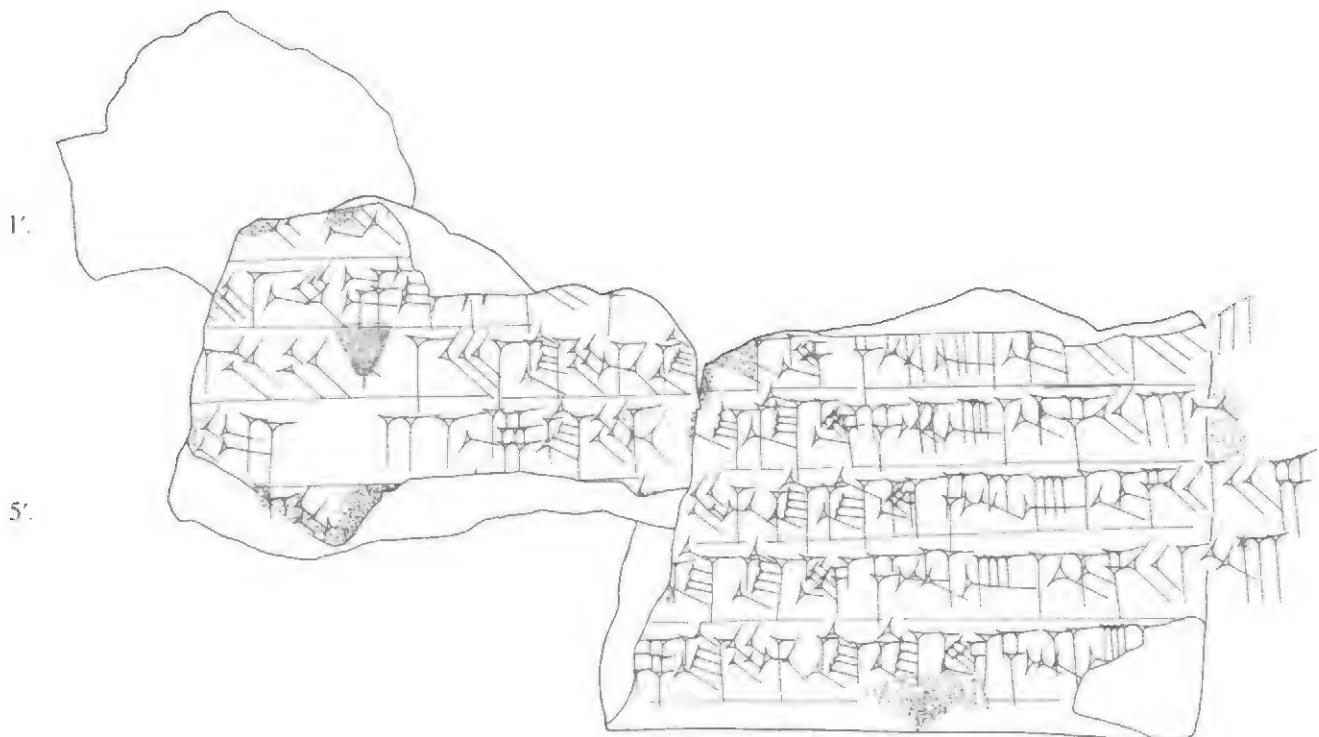
Text 85



Text 86



Text 87 Obverse(?)



Text 87 Reverse(?)

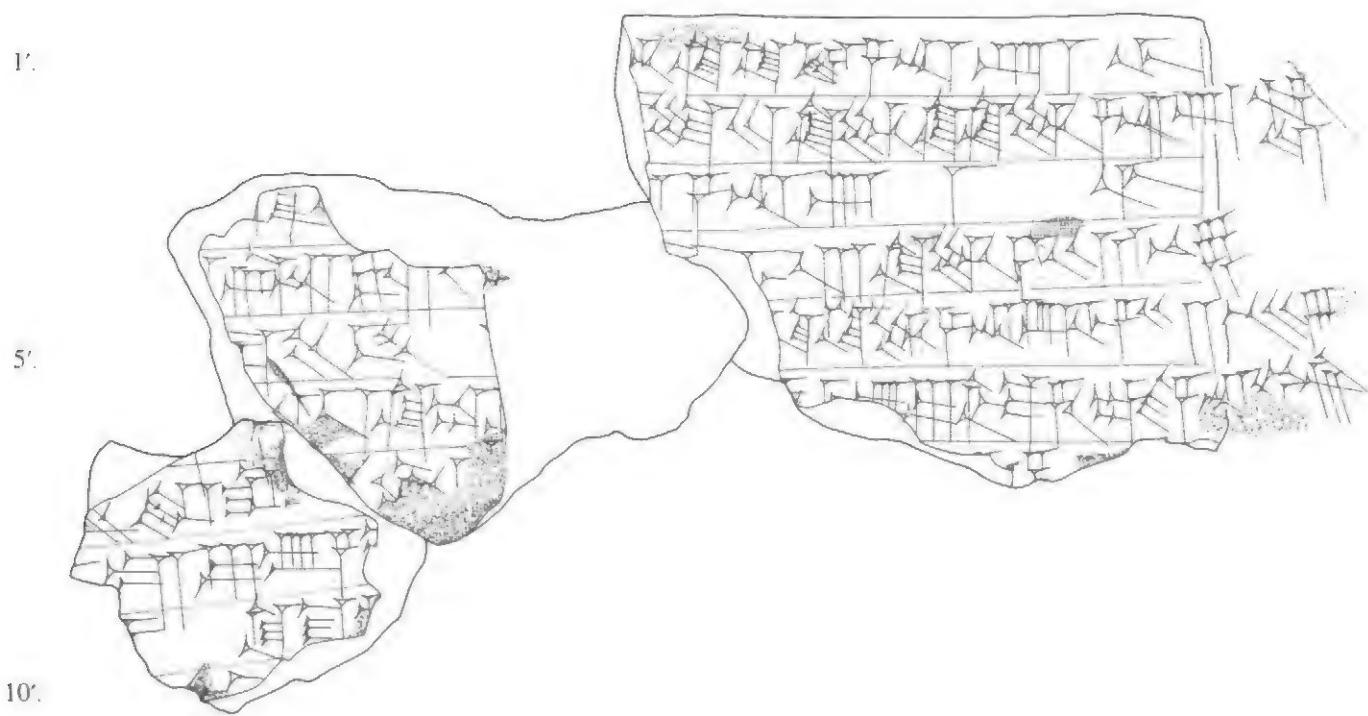
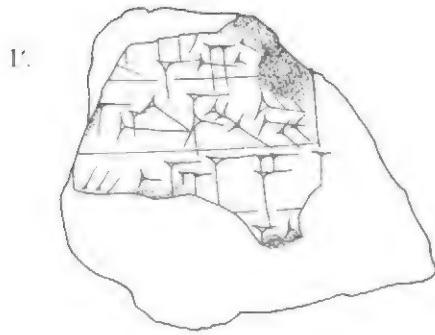
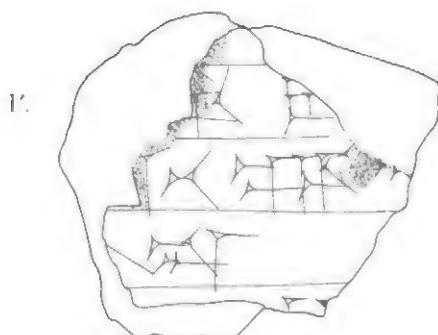


Plate 114

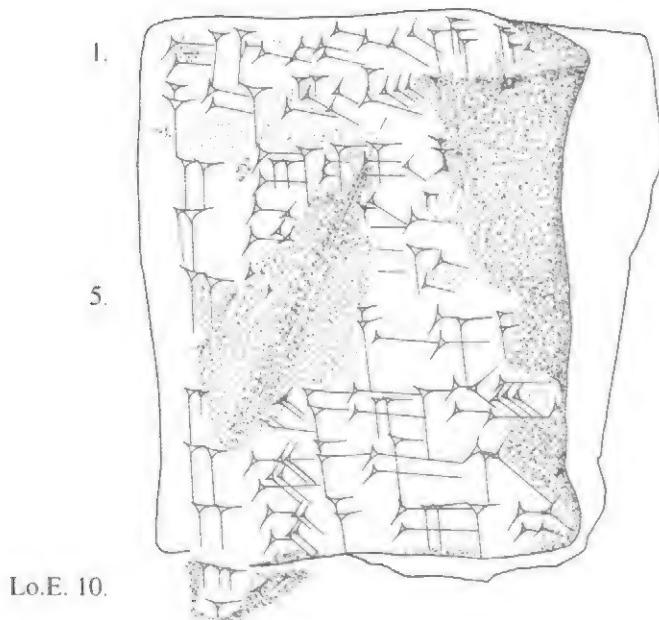
Text 88 Obverse(?)



Text 88 Reverse(?)

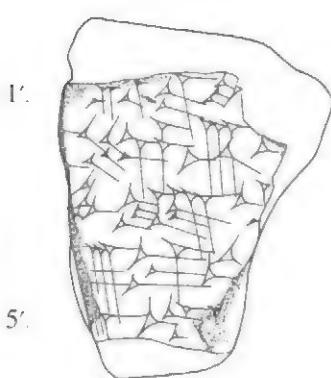


Text 89 Obverse

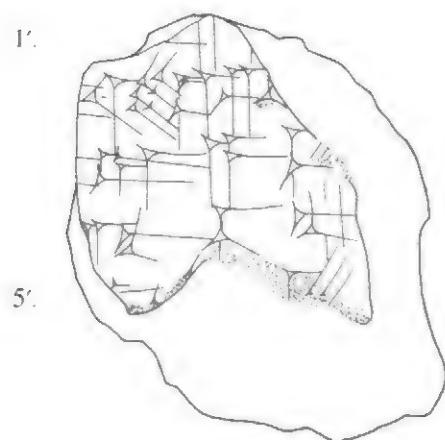


Lo.E. 10.

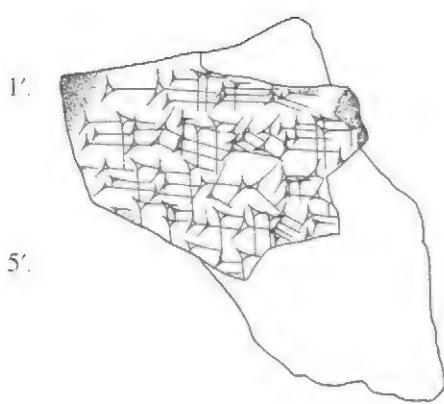
Text 90



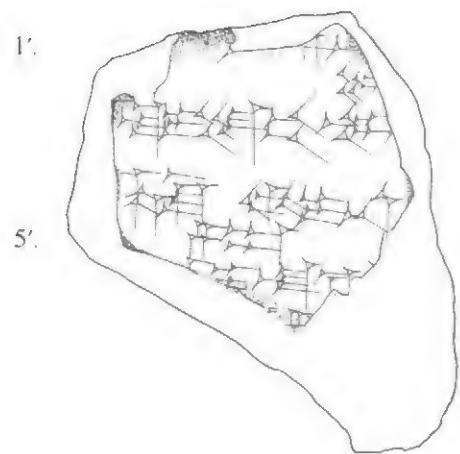
Text 91



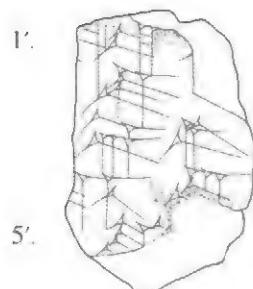
Text 92



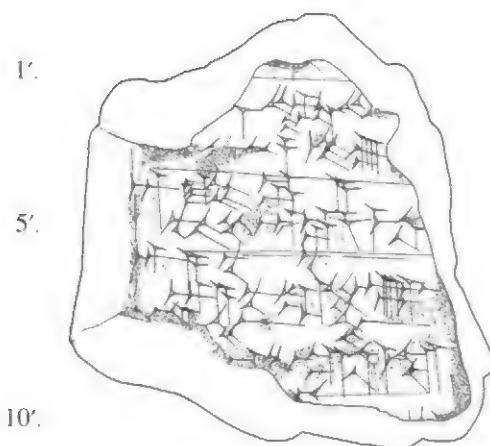
Text 93



Text 94



Text 95



Text 95 Reverse

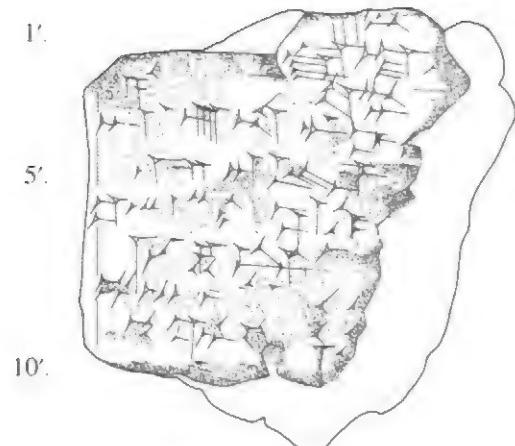
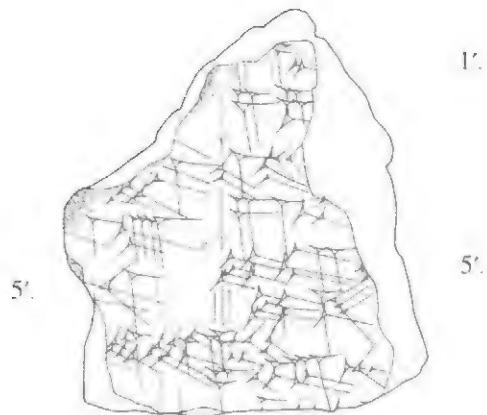


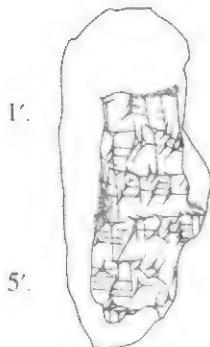
Plate 116

Text 96

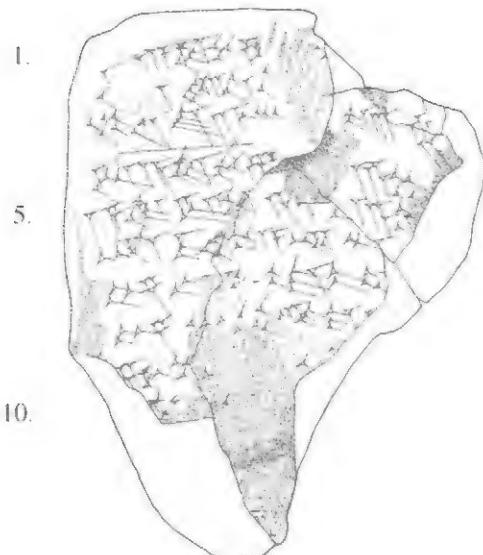
Left Col. Right Col.



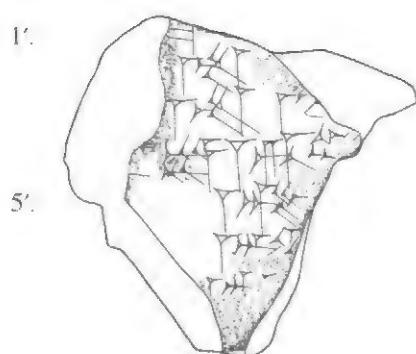
Text 97



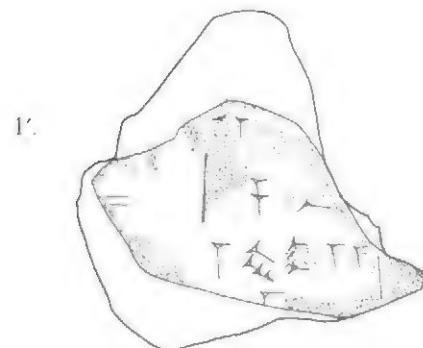
Text 98



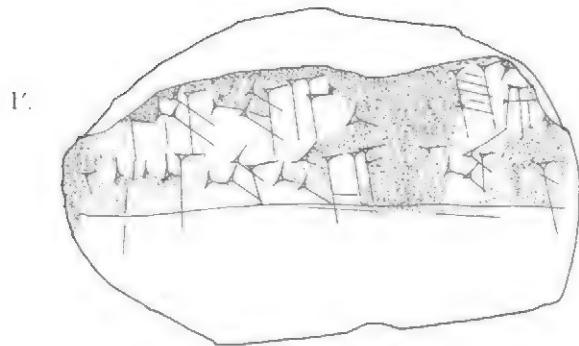
Text 99



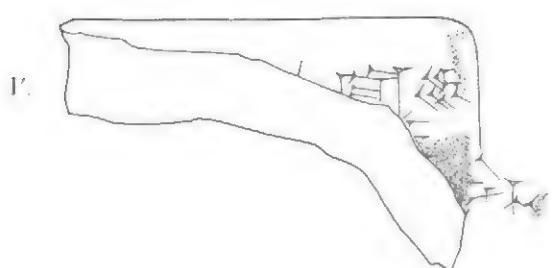
Text 99



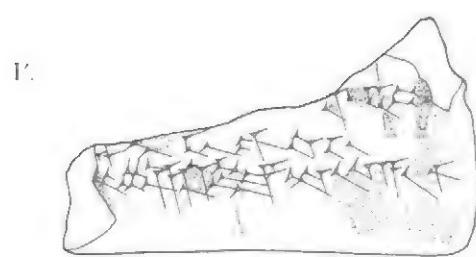
Text 100



Text 101 Obverse



Text 101 Reverse



Text 102

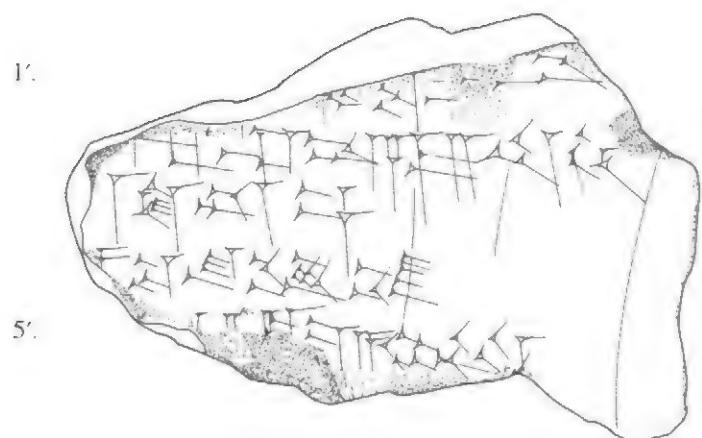
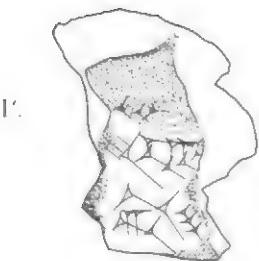
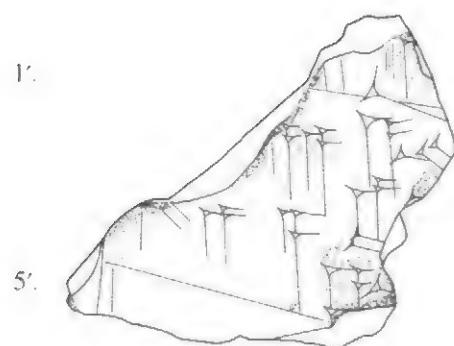


Plate 118

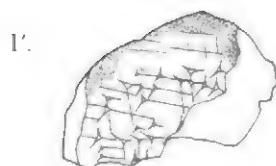
Text 103



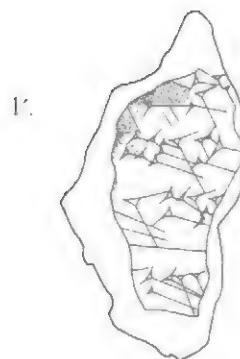
Text 104



Text 105



Text 106



PLATES 119–132

PHOTOGRAPHS

All photographs reproduced at a scale of 1:1



Text No. 8 Obverse



Text No. 8 Right Edge

Plate 120



Text No. 8 Reverse

Plate 121



Text No. 26 Obverse

Plate 122

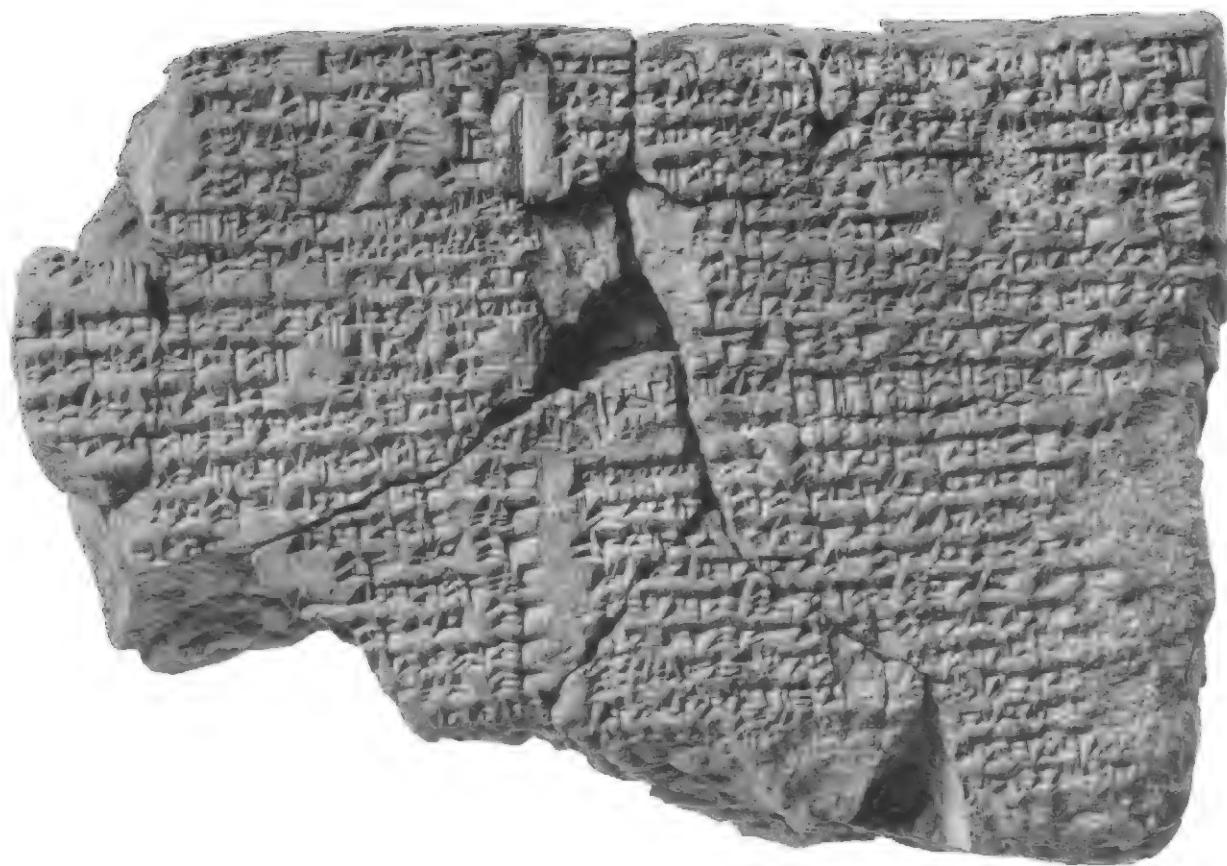


Text No. 26 Reverse



Text No. 27 Obverse

Plate 124



Text No. 27 Reverse



Text No. 32 Obverse



Text No. 32 Reverse

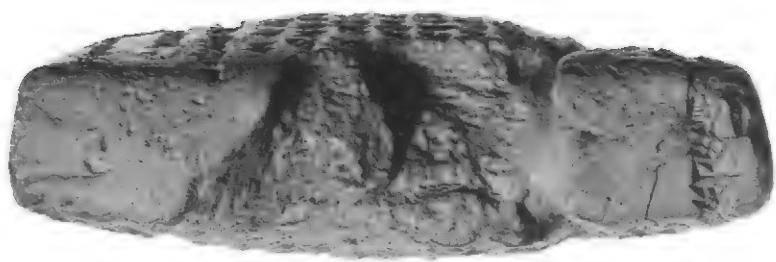
Plate 126



Text No. 42 Obverse



Text No. 42 Reverse



Text No. 44 Right Edge



Text No. 44 Obverse



Plate 128



Text No. 44 Reverse



Text No. 61 Obverse



Text No. 61 Reverse

Plate 130



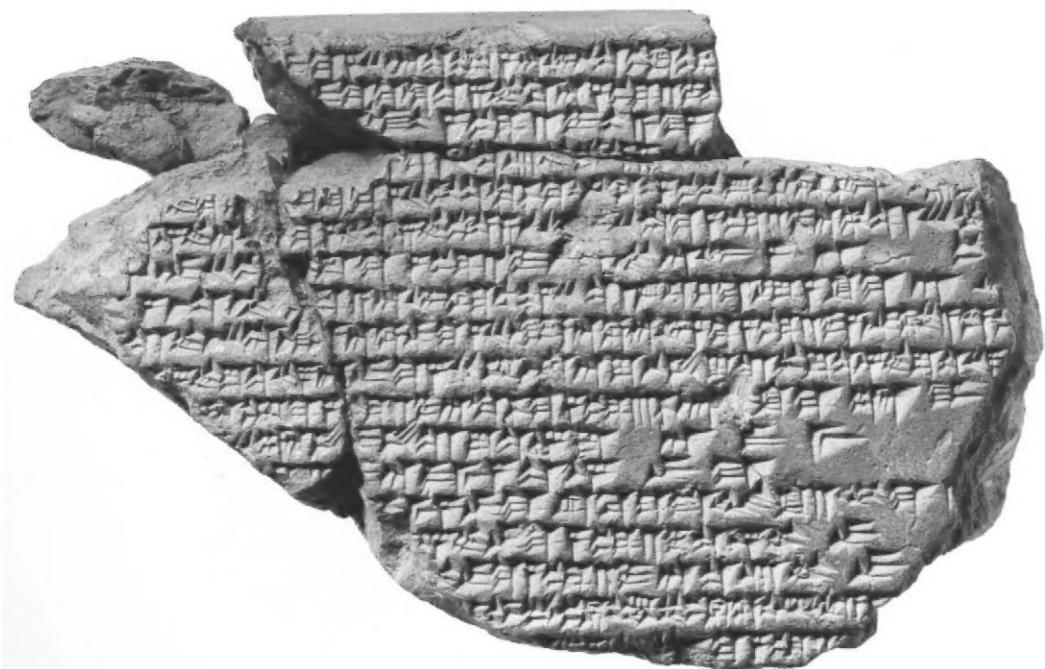
Text No. 68 Obverse



Text No. 68 Reverse

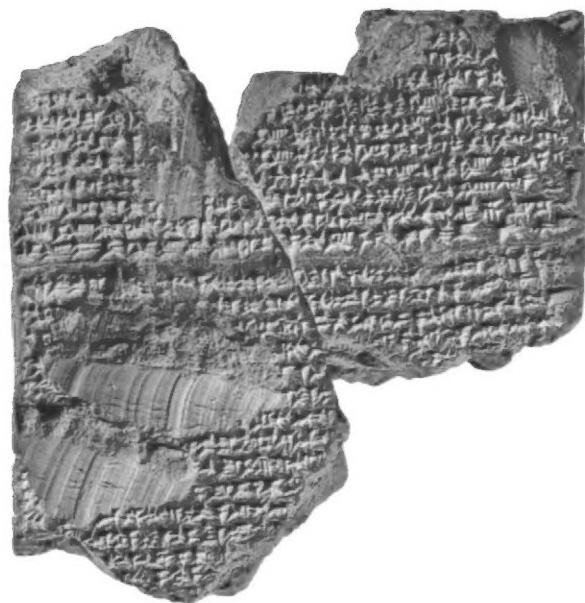


Text No. 71 Obverse



Text No. 71 Reverse

Plate 132



Text No. 81 Obverse



Text No. 81 Reverse

ISBN 2-503-51740-4



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